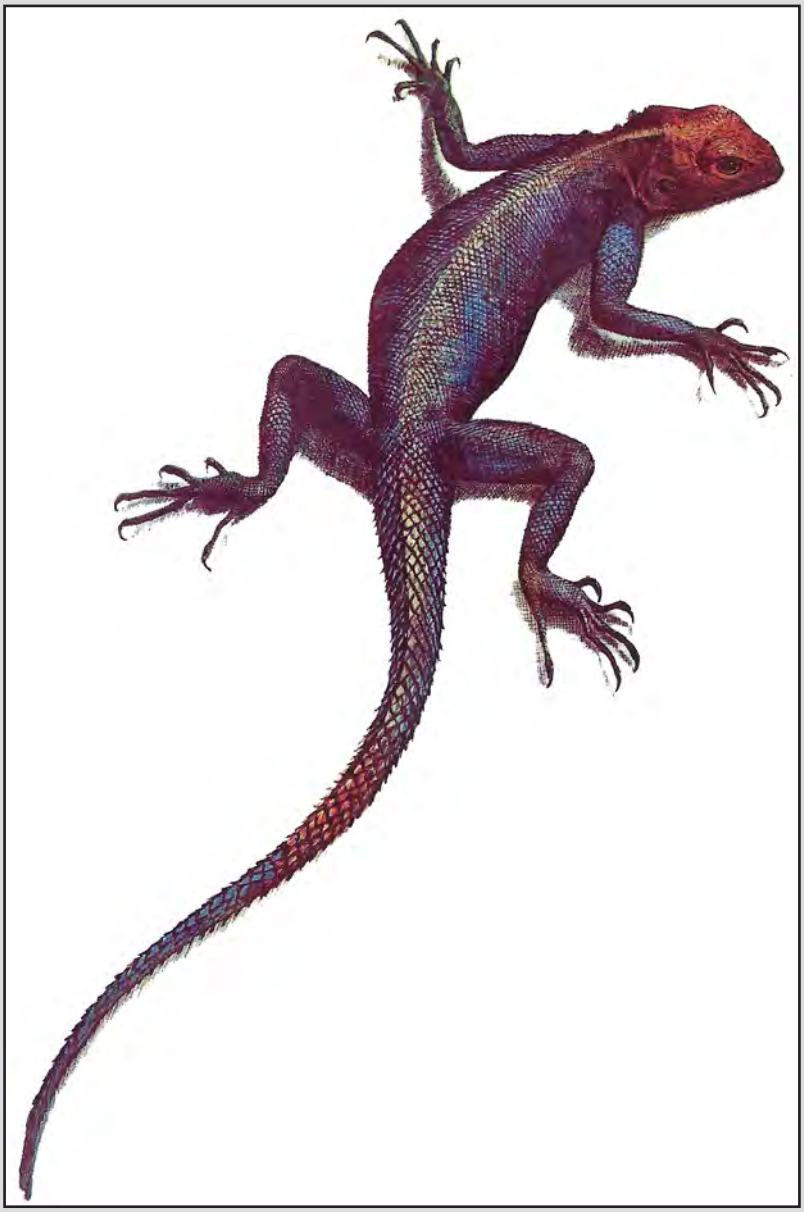
Bibliotheca Herpetologica

A Journal of the History and Bibliography of Herpetology



VOL. 10, NO. 2, 2014

International Society for the History and Bibliography of Herpetology

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www.t-ad.net/ishbh

The Society

The **ISHBH** is a not-for-profit organization established to bring together individuals for whom the history and bibliography of herpetology is appealing, to promote the knowledge of related topics among members and the general public, and to promote research. Membership is open to anyone who shares the aims of the Society.

Membership

Regular membership for two years is US $45, Sponsoring US $75, Institutions US $75, and Benefactor US $150. The present period 2013 to 2014 starts with *Bibliotheca Herpetologica* volume 11. Life Membership is US $450 starting from 2013, but will also include volumes 9 and 10. The fee includes a subscription for two volumes of the Society's journal *Bibliotheca Herpetologica*. A membership application form that includes the possibility to order back issues can be found on our website. Payment can be made by personal check or money order in USD drawn on a US bank sent to the Secretary-Treasurer or the Chairperson. Payment can also be made by transfer in euro to Plusgirot, Sweden, IBAN SE83 9500 0099 6042 0455 1206, BIC NDEASESS. Payment by credit card can be made on the website ZenScientist, www.zenscientist.com. This website is run by Breck Bartholomew, Utah, USA. It can be used also for applying for membership to many other national and international herpetologicsl societies. ZenScientist.com is designed to promote communication and collaboration within the herpetological community. Try it!

Members are encouraged to contribute with articles, essays, news of meetings, hints on antiquarian trade, book reviews and other issues associated with herpetology. The Society organizes seminars, visits to libraries, museums, etc. in connection with herpetological meetings with international participation. The Society works to facilitate informal contacts among members so that the members can meet, offer support in knowledge and transact exchanges of literature. Correspondence to the Society shall be addressed directly to a Committee member or officer, either by post or email.

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Instructions for Authors

Authors submitting a manuscript do so on the understanding that the work has not been published before and is not being considered for publication elsewhere. Manuscripts are peer reviewed. The language of *Bibliotheca Herpetologica* is English. See the ISHBH website for more details: www.t-ad.net/ishbh/author.html

Society News

Membership and Journal Status

By now the Society has published twenty issues of its journal, which was named *Biblioteheca Herpetologica* from April 2005 with volume 5, number 2. The first issue had simply the name of the Society with the epithet *Newsletter & Bulletin* and came out in May 1999. The production has been a bit irregular mostly depending on submittal of articles that have been accepted for publication, but the members have always received two volumes with two issues each (volume 9 was a double issue) during each membership period. Thus, the normal two-year membership periods have been extended without any additional dues from the members. The current two-year membership period started in 2013 and by that time only number 1 of volume 10 had been circulated. The issue that you now hold in your hands is indeed behind schedule, especially as it is attributed to the membership period that ended in 2012. However, our object persists in publishing two volumes in each membership period of normally two years, but which can be extended when necessary. As we did with *The Herpetological Legacy of Linnaeus*, i.e. volume 9, we may optionally combine two issues in one volume also in the future, something we plan for the impending volume 11.

This said, we remind all members that have not yet renewed that now is the time to do so for the combined period of 2013 and 2014. However, we will update all members individually by email or surface mail about the payment status, as most members have already paid for the new period. At the end of 2012 we were 158 members and since then we have added many more new members. The Society appears to be valued and stable, but recruitments of new members continue to be a goal and we hope that you can help out.

Meeting Activities

A goal of the Society is to organize meeting activities such as seminars and visits to institutions of suitable kind in connection with herpetological meetings with international participation. We had in 2007 a half day symposium in St. Louis on Linnaeus's contributions to herpetology (the proceedings of this symposium were published under the title *The Herpetological Legacy of Linnaeus)* and we have visited numerous outstanding libraries whenever it has been possible, normally in conjunction with the joint meetings of the large US societies that deal with herpetology, but also in St. Petersburg, Russia (for details of our meetings please refer to the website). We have successfully congregated every year since 1998 for a business meeting and a shared luncheon, although an appropriate institution has not always been at hand.

The Society Meetings 2012 and 2013

The Business meeting for 2012 was held in conjunction with 7th World Congress of Herpetology at the campus of the University of British Colombia, Vancouver, Canada. Fifteen members attended the Business Meeting on August 10. The present Board members were elected for a two-year period.

Albuquerque, New Mexico, USA was the place for the 2013 Business meeting this in conjunction with the US Joint Meeting of Ichthyologists and Herpetologists. Seven members and one guest attended the Business meeting on July 13 at The Library, a trendy restaurant near the congress centre. There were no elections on the agenda this year and the Treasurer's Report for 2012 was approved.

The Society Meeting 2014

The Society meeting will be held in conjunction with the 2014 Joint Meeting of Ichthyologists and Herpetologists, July 30–August 3,

to be held at Chattanooga Convention Center, Chattanooga, Tennessee, USA along with the annual meetings of the organizing Societies: 30th annual meeting of the American Elasmobranch Society, 94th annual meeting of the American Society of Ichthyologists and Herpetologists, 72nd annual meeting of the Herpetologists' League, and the 57th annual meeting of the Society for the Study of Amphibians and Reptiles in conjunction with the International Society for the History and Bibliography of Herpetology (ISHBH). Details will appear in due course on our website.

The Society Meeting 2015

The University of Kansas will be the host for a herpetological meeting in the USA from July 29 to August 3, 2015 in Lawrence, Kansas, USA together with the organizing societies, the Society for the Study of Amphibians and Reptiles (SSAR) in conjunction with the International Society for the History and Bibliography of Herpetology (ISHBH) and Partners in Amphibian and Reptile Conservation (PARC). This was the place where the first thoughts that led to the establishment of our society were shaped in 1996. It is our plan to celebrate this event by arranging a half day symposium on herpetological history and bibliography during the meeting. In addition, there will be a display of rare herpetological books at the Spencer Library on the campus of the University and, on the day following the conclusion of the official meeting, the ISHBH will be having a full day program including roundtable discussions on topics of common interest and additional library visits. Please plan for attending these occasions already now.

On the Cover

Agama colonorum (=*A. agama*). Harry Johnston's illustration from his book *Liberia* (1906). See C. Kenneth Dodd Jr.'s article "Herpetofaunal Contributions of Johann Büttikofer and Harry Johnston in Liberia", on page 33 for more details.

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Philibert Marragon (1749–1826) and the *Mémoire sur l'Isle de Rodrigue* (1795)

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In memory of our friend Alfred North-Coombes (1907–1998),
Historian of Rodrigues. R. B. and A. S. C.

After recalling some features of Rodrigues, its tortoises and its large lizards, we present a brief biography of Philibert Marragon, the first administrator and governor who took up residence on the island. This biography is partly adapted from publications of Alfred North-Coombes (1971), North-Coombes and Lagesse (1990) and Lilian Berthelot (2002), with genealogical data from Civil Status Archives of the département of Haute-Garonne and website Geneanet.org. We then reproduce and translate the full text of a report written by Marragon in 1795 in which he described, in a more or less detailed way, land and sea geography, flora and fauna (including several species of reptiles now extinct), crops, climate, as well as annoyances of Rodrigues, then almost uninhabited.

THE MASCARENE ISLANDS AND RODRIGUES

The Mascarene Islands, so named in honour of the Portuguese navigator Pêro Mascarenhas – although he was certainly not their discoverer – include only three islands of volcanic origin, which extend over a thousand kilometres to the east of Madagascar in the western Indian Ocean: from west to east, La Réunion, Mauritius, and Rodrigues. Rodrigues Island (about 18 x 8 km, 103–109 km²) is by far the smallest of the Mascarene Islands, and probably the oldest. A moderate relief (summit at only 396 m) along a central spine with several deep valleys radiating from it, an extensive lagoon completely surrounded by reefs (about 22 x 18 km), and a vast underwater plateau (about 55 x 30 km at the 100 m isobath) attest to this age. The oldest bedrock of Rodrigues could be older than fifteen million years (Cheke and Hume 2008). Its origin is a little different from that of La Réunion and Mauritius, which are emerged volcanoes. Rodrigues is the result of the rise of a magma body from a break of the ocean floor. It is likely, but not yet proven, that the Mascarene Islands were first identified and perhaps visited by the Arabs. Rodrigues was discovered by the Portuguese in 1528, occupied by the French from 1735 to the taking of possession by the British in 1809. The island has been politically dependent on Mauritius, formerly Isle de France, since 1735; independent since 1968, Mauritius granted Rodrigues administrative autonomy in 2001.

Rodrigues is also, among the Mascarenes, the island whose original natural history is the best known, thanks to the account of François Leguat (1638–1735) published in 1707, a report by Julien Tafforet (?–?1732) written around 1726, and manuscripts of the canon Gui Alexandre Pingré (1711–1796) describing his several months stay on the island in 1761. Much more recently Rodrigues was the subject of histori-

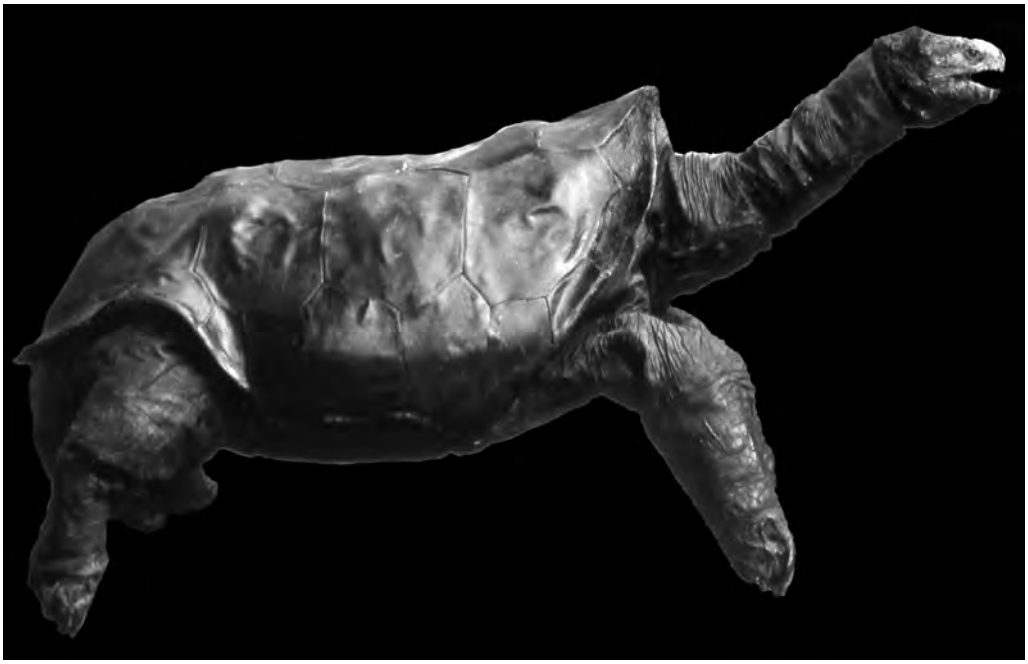

FIGURE 1. The great tortoise of Rodrigues, *Cylindraspis vosmaeri*. Stuffed adult male, MNHN 1883.558. Shell length: 85 cm.

cal and geographical studies by Jean-François Dupon (1969, 1974), Alfred North-Coombes (1971, 1979, 1980, 1986), Jean-Michel Jauze (1998), Lilian Berthelot (2002) and numerous scientific publications, among others, those of ASC (Cheke 1987, Cheke and Hume 2008), references also essential to a comprehensive bibliography of these islands.

THE TORTOISES OF RODRIGUES

The Mascarenes were, during the seventeenth and eighteenth centuries, exploited for their tortoises, which now are totally exterminated (North-Coombes 1986, Cheke and Hume 2008). The reports by witnesses of their existence all comment on their abundance, their large size, and especially their culinary qualities, as well as their ability to live several months without feeding when shipped as fresh foodstuff. On Rodrigues, two species of tortoises lived in sympatry; they had acquired an extreme reduction of their skeleton and shell, and their color was more or less uniform brown, lighter in the young and darker in adults. A peculiarity of the cephalic arterial circulation, noticeable on the skulls (enhanced development of the palatine artery, reduction of the temporal artery) shows that these two species were phylogenetically related, with a common ancestor distinct from the other species of the Mascarene Islands (Bour 1985); these affinities were confirmed by DNA studies (Arnold and Austin 2001; Austin et al. 2002). The Rodrigues species mainly differed in their shape and size.

The large one, *Cylindraspis vosmaeri* (Suckow, 1798), had a long neck and a shell raised at the front, adaptations that allowed it to reach leaves and fruit of trees before they fall (Figure 1). The straight-line length of the shell could reach 110 cm, extrapolating from a subfossil[1] tibia of 20 cm, compared to one from a complete skeleton (tibia of 12.5 cm, shell of 68 cm). Julien Tafforet, who stayed on Rodrigues from October 1725 to June 1726, noted: "*the biggest I've seen are three feet to three feet eight inches in length of shell*" (Dupon 1974: 12) or, according to the French foot of 32.4 cm, 97 to 119 cm. Taking in account the length of the cervical vertebrae, Günther (1877: 54) proposed a length of 4½ feet, or 137 cm, which is certainly

FIGURE 2. The little tortoise of Rodrigues, *Cylindraspis peltastes*. Subfossil, bony shell, BMNH 76.11.1.53 (top) and non fossil, scaly shell, MNHN 7831 (bottom). Shell length: 39 cm.

exaggerated: he extrapolated from the vertebrae of an Aldabra tortoise, whose the neck is not so strongly elongated. The smaller species, *C. peltastes* (Duméril and Bibron, 1835) did not exceed 46 cm and its shell, althought narrow, was regularly convex, with rounded flanks (Figure 2); it is likely that this reduction in size was secondary, after the establishment of the tortoises' ancestors on the island. Its morphology fits well with a tortoise grazing or gathering plants at ground level. These ethological differences were especially described by Arnold (1979: 143), but Günther (1875: 4683) had already deduced from the cervical vertebrae of large Rodrigues tortoises, that "*... the animals having had the habit of bringing in the neck a vertical position ...*".

Those descriptions are based on a small number of specimens. One individual found as fossil cannot be categorically associated to one or the other morphotypes. It belongs to a small but adult tortoise with a narrow shell, not raised in front, flattened above, with straight and parallel sides (collections of the Natural History Museum in London, paleontology). Another 'odd' shell was recently unearthed by Julian Hume and his team (J. Hume, pers. comm., June 2013).

This sharing of resources allowed both tortoises species of Rodrigues to live in ecological balance, at least until the arrival of man. François Leguat (1706: 90) observed strange behaviour: "*There is in this island a great abundance of tortoises, which are sometimes seen in troops of two or three thousand, so that we can do more than a hundred paces on their backs or on their carapace, to speak properly, without setting foot on the ground. They gather in the evening in cool places & stay so close to each other that it seems that the place is paved with them. There is another thing that is strange is that, on four sides a few paces from their troops, they always place, sentries who turn their backs to the camp, and who seem to be on watch, which is what we have always noticed, but the mystery seems all the more difficult to understand, as these animals are unable to defend themselves, or to flee.*" The Rodrigues tortoises were systematically exploited from 1735, using specialized collectors, "*a dozen blacks under the command of a white officer,*" who built enclosures where several thousand animals were accumulated for transport to Mauritius by specially chartered vessels, the *tortoise-boats* according to North-Coombes (1986). The tortoises were primarily shipped to feed ship's crews and patients at the Port Louis hospital, but were so good to eat that, as Canon Pingré (1763) mischievously remarked, "*it is said that the leaders of this island are always ill when the corvette arrives*." Accurate accounts revealed that within thirty years, at least 280,000 tortoises had been collected, of which many did not survive the transport due to their fragile shell (North-Coombes 1986). The fact that modest brigs, small vessels with a single deck, could carry up to 6,000 tortoises suggests that they were mainly or exclusively individuals of modest size.

Among the Mascarene tortoises, those of Rodrigues are by far the best represented by non-fossil material in museum collections, comprising two hatchlings in alcohol, a old mounted male, a female as a nearly complete skeleton, and four shells with scutes. In addition, a gouache by Claude Aubriet dating back to 1730, representing the skeletonized female

before preparation, and a series of drawings by Paul Sanguin de Jossigny, executed at the Isle of France for Philibert Commerson near 1770, depict tortoises of Rodrigues observed alive.

All this material, with the exception of two shells – one at the Museum of Natural History in Leiden, another one in Vienna, probably given by the Paris Museum as "reparations" in 1815 (Figure 3), is preserved in the Natural History Museum of Paris. Philibert Marragon wrote a report in 1795 which represents, after the accounts of Leguat, Tafforet and Pingré, one of the few sources of knowledge of the original flora and fauna of Rodrigues, and the changes over the century before the first permanent installation of settlers. Marragon, who had the transformations right in front of his eyes, complained of the imminent and final end of these tortoises.

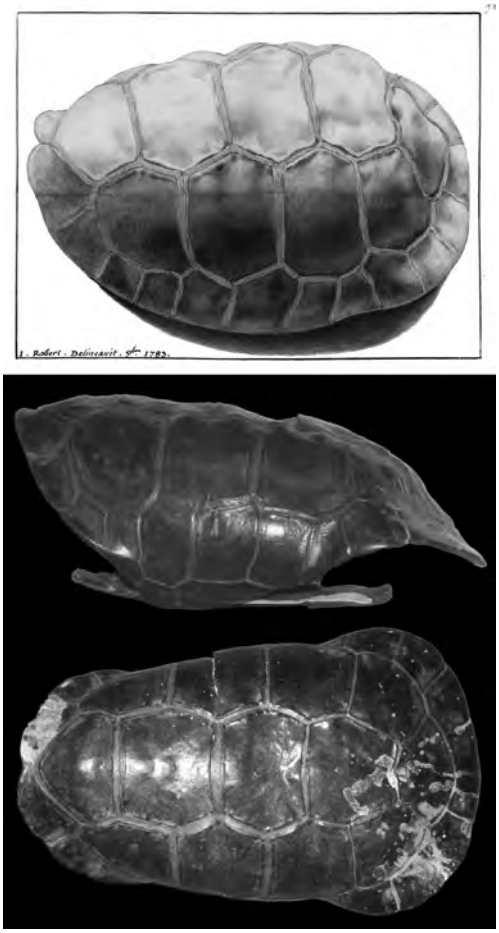

FIGURE 3. Shell of the great tortoise of Rodrigues *Cylindraspis vosmaeri.* Drawing by J. Robert, 1783, MNHN Central Library (top). Same shell, currently in the Natural History Museum of Vienna, NMW 1461 (bottom). Shell length: 50 cm.

THE LIZARDS OF RODRIGUES

The lizards of Rodrigues did not have any economic interest like tortoises, but their conspicuous size, as well as the bright colors of some of them, were noticed by the same people who saw the tortoises *in situ*. Their short history and evidence of their existence have been summarized by Vinson and Vinson (1969: 295, 300), followed by Cheke and Hume (2008: 242-243). Leguat (1708: 108) was the first to describe "*lizards the length of one foot: we do not get tired of looking at their beauty. There are black ones, blue, green, red, gray, and of all them most vivid, and bright. Their most common food is the fruit of the palm tree*", and also "*another species of nocturnal lizards, grayish in color, whose face is very ugly: they are as big & long as an arm, and their flesh is not bad*". Tafforet (1726) noted "*there are many lizards, of which the largest I have seen are the thickness of a man's wrist.*"

Finally Pingré (1761) noticed "*other lizards nearly a foot long; the brightest colours, blue, green, yellow etc. seem to dispute as to which should clothe these lizards most vividly, though blue and green dominate on the head and back. François Leguat claims to have seen black, blue, green, red and grey, and all most vivid and striking. Here is what I can confirm having seen. I had already met in Rodrigues with several of these lizards, without having had time to examine them* [closely]. *I saw many on the islot du Large* [now île aux Fous]*; they could not flee far, but hid promptly in the cracks in the rock. I pursued them right into their holes. I had seen a superbly coloured lizard enter a crevice; with a twig I forced out of the same crevice a lizard whose dirty black colour almost horrified me; I had already seen some similarly uncoloured, and did not doubt that they were another species. Finally I watched one carefully; I did*

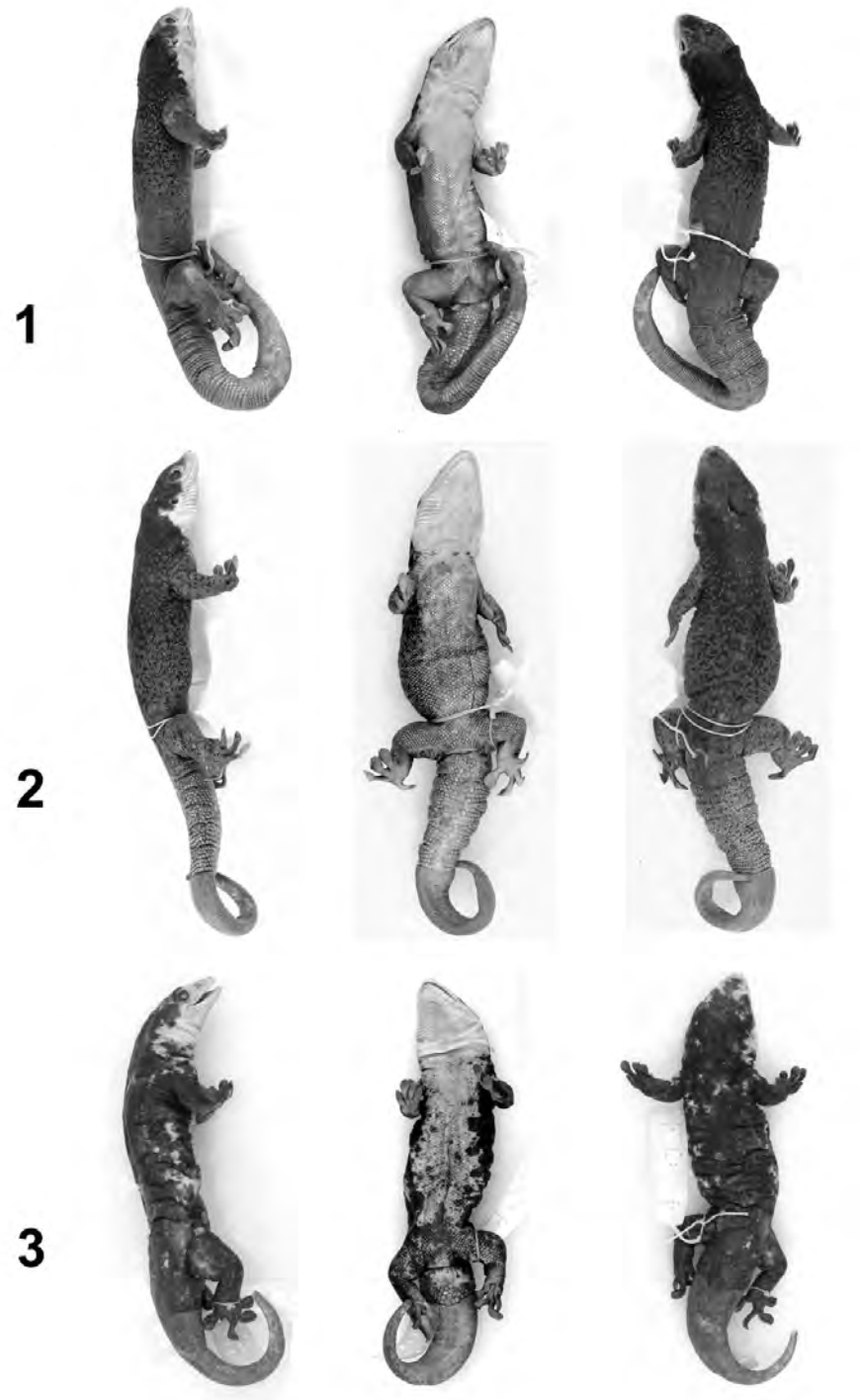

FIGURE 4. The large diurnal lizard of Rodrigues, *Phelsuma edwardnewtonii*. 1: MNHN 1917.165 (TL: 207 mm, SVL: 96 mm); 2: MNHN 1917.166 (TL: 176 mm, SVL: 85 mm); 3: MNHN 1293 (TL: 155 mm, SVL: 87 mm). TL : total length ; SVL : snout to vent length.

not move, for fear of putting it to flight; the brightness of the colours, blue, green, yellow etc. charmed me. A moment later the lizard saw me; black patches erupted in the brightness of its skin; these patches grew rapidly and in a few seconds my lizard was covered in a hideous black all over its body, and took refuge inside a rock. I am confident, as I have said, that I was not mistaken in this observation[2]". It was over two centuries after the Pingré's trip that Vinson and Vinson (1969) clarified the taxonomy of both large lizards of Rodrigues, each included in the genus *Phelsuma*. The colourful, diurnal one was first named *Phelsuma newtonii* by Boulenger (1884), then *P. edwardnewtonii* by Vinson and Vinson (1969); the gray and black, nocturnal, *Phelsuma gigas*. Of the first species only seven specimens in alcohol remain: in the London and Paris natural history museums (Figure 4), and one specimen in private hands in Germany (Rösler 1993).

No specimens of the second species, described in detail as *Gecko gigas* by François Liénard (1842), a Mauritian naturalist, were preserved; only few fossil bones have been found. Liénard (who also observed the first species) kept alive an individual caught on the Frégates islet ("*here one can find them in large quantities*"); Liénard described this specimen as being 14 inches long (38 cm), but he mentioned a length up to 20 inches (50 cm); bony remains correspond with a length close to 44 cm (Vinson and Vinson 1969: 301): *Phelsuma gigas* was, by far, the largest species of the genus. Like the tortoise hatchlings, it was probably the introduced rats and cats, as well as fire, which destroyed them, and brought these lizards to extinction. Marragon only mentioned brightly colored lizards: it is possible that by the time of his arrival in Rodrigues the large nocturnal lizards had already become extinct on the main island, only subsisting longer on a few offshore islets.

PHILIBERT MARRAGON

Philibert Marragon was born on 20 October, 1749 in Auterive, between Toulouse and Pamiers, département Haute-Garonne, France

FIGURE 5. Registration of birth and christening of Philibert Marragon at Auterive (1749). Communal archives (top) – Court archives (bottom). Département of Haute-Garonne Archives, civil status.

– not in département Ariège, as indicated by North-Coombes and Lagesse (1990). He was baptized on the 26th in the parish of St. Paul d'Auterive (Figure 5). He was the son of Philibert Marragon and Jeanne Marie Elisabeth Ramel (not Maurel or Mamel, a name mentioned in some genealogies), united in marriage on 19 November 1737, in Montolieu (Aude). According to our genealogical researches, the Marragons (name sometimes spelled Maragon in parish and civil status acts, and in the literature) were from Carcassonne and the Ramels from Montolieu, two localities in the département of Aude about twelve miles apart. The father was a merchant, and later manager of the Manufacture d'Auterive, a royal factory (since 1726) specializing in making luxury fabrics designed to compete with English products in the Échelles du Levant, the trading ports of the Ottoman Empire. His godfather, also called Philibert Marragon, was a cousin and merchant in Toulouse.

Philibert Marragon had at least five brothers and a sister. The eldest, Jean-Baptiste, born in Luc-sur-Orbieu[3] on 9 July, 1741, was famous in his time because as a deputy of Aude during the National Convention (a legislative assembly in France during the French Revolution) he voted for the death of Louis XVI (Pinaud

1990: 170). So he was later, in 1816, exiled as a regicide; he retired to Brussels and died there on April 1, 1829. The cousin Dominique Vincent Ramel de Nogaret (1760–1829), who had followed the same political path, also exiled, died in Brussels a day earlier. The sister, Marie Catherine Françoise, born in Luc-sur-Orbieu on 10 October, 1745, died in Auterive on 11 July 1760. The other four brothers were born in Auterive: Jean Theodore on 4 April 1747, Jean Cazimir on 7 February 1752, Pascal Jean Auguste on 22 April 1753, and Jean Marie Bruno on 23 October 1756. Only Auguste settled in Auterive; he was married on 29 October 1782 and died on 4 September 1828.

Philibert Marragon got to know the Mascarenes at the age of twenty, as a sergeant in the regiment Royal-Comtois, during a mission that ended badly for his unit. This regiment was founded by Louis XIV in 1674 and named in 1685. It disappeared as such in 1796. The participation of sergeant Marragon's regiment appears in the following episode, narrated by Susane (1876): "*The regiment reached full complement in Rochefort on January 1769; on the following March, the 1st Battalion went to Brest, and there was embarked to the Ile-de-France. The 2nd Battalion, after short stays in the Ile de Ré and Rochefort, went to Lorient in December, and there embarked too on the 29th, for the Ile-de-France. An order, of which the draft dated 15 December 1768 was later found, gave the Royal Comtois a special destination in the colonies. This destination, which was, to all appearance, intended to establish the regiment in the service of the colonies of the Indian Ocean, gave rise in 1772, when the other infantry regiments which had been assigned to the service of ports and colonies returned to regular service* [in France]*, to agitation and finally an insurgency, whose officers were the promoters. It was certainly very serious, because a council of war, assembled on 10 May 1773, under the presidency of Marshal de Muy, sentenced seven captains to undergo ten to twenty years in prison, and the officer corps was almost entirely renewed. The companies of the regiment were successively returned to France from 18 September 1772 until 12 April 1773*."

Marragon returned to the Isle of France [Mauritius] five years later, in 1778, on board *Le Flamant*. In 1782 he bought a home in Petite Rivière, not far from Port-Louis. Employed in accounting, he became Chief of the *Bureau des poudres* (gunpowder), then under the *Bureau of Control* of the Navy. Later, at fifty-five, he reckoned he had done "*nearly seven years of military service*" (i.e., from 1767 to 1773) and that "*the sum of administrative service* [was] *of 26-27 years*" (i.e., from 1778 to 1804). On 1st January 1794 he married at Port Louis, Isle of France, Marie Jeanne Elisabeth Guillou Neuville, born on 24 July 1774 in Saint-Denis, Bourbon, now La Réunion. He was 44 years old and she 19 and a half years. His spouse's father was Frédéric Daniel Guillou de Neuville, born near 1740, native of Rennes in Brittany, himself the son of Hercule[4] Paul Guillou Neuville, a lawyer at Parliament of Brittany, Seneschal of Châteaugiron. Arriving in June 1770 at the Isle of France, René Fréderic Guillou de Neuville practiced various trades, then went to work in Bourbon. On 13 September 1773 he married in Saint-Benoît, Bourbon, Suzanne Elizabeth Grondin, born on 3 July 1755. The Grondins represent one of the first families who settled in Bourbon: her grandfather François Grondin, who arrived with his parents in May 1676, aged 4 to 6 years, died there on 27 February 1747, by then father of fourteen children. Guillou de Neuville sailed back in 1788 to the Isle of France, where he briefly held the positions of Commissioner Inspector of police and Controller Auditor of beverages. He returned to France in 1789, and, ruined, he came back to the Mascarenes, leaving Brest on the end of 1792 (Anon., s.d. 1).

In 1794, at his request, Philibert Marragon was appointed Civil Administrator of Rodrigues – he signed *Agent civil*. He had visited the island for the first time in 1791. He returned to settle there on 12 May 1794, aboard *La Thérése*, after a long journey of 35 days (for 600 km: the brig was boarded by an English ship, the *Orpheus*, Captain Newcome)[5]. Marragon was accompanied by his wife Elisabeth de Neuville and his stepmother born Suzanne Elizabeth Grondin; his stepfather, René Frédéric Guillou

de Neuville, joined a little later, and parents in-law moved into a property bordering Oyster Bay. Both died after 1804. Marragon's estate (state property), *L'Orangerie*, so named because in 1761 citrus trees were planted there by Yves Mathurin Jullienne[6], covered 400 acres (169 ha, one sixtieth of the island) on the heights of the Oyster Bay, near Mount Charlot. From here Marragon could watch the ships, but he also established a lookout post in the extreme south-east of the island. He regularly sent reports on ship movements to General Anne Joseph Hippolyte de Maurès de Malartic (1730–1800), Governor-General on the Isle of France. Marragon maintained a trade with the Isle of France, including seafood, through Jean Baptiste Pipon (1754–1825), deputy, merchant, farmer, the father of his future son-in-law; he also sold his cattle to passing ships. Among its powers, Marragon was authorized to issue licenses to new settlers; according to the 1798 instructions he granted 100 acres to a married couple, adding 50 acres for each child.

Contrary to what is sometimes written, the Marragons were not the earliest permanent settlers in Rodrigues to develop crops and livestock: they were preceded by Germain Le Gros and Michel Gorry (North-Coombes 1971). Le Gros settled in September 1792, aged 35, with his partner Frémont; he was a sailor who owned several small vessels and frequently went to the Isle of France; he finally left Rodrigues in 1850, aged 93 years! Gorry, from Saintonge, married at Port-Louis in 1790, came to the island in June 1793, aged 34; he died in Rodrigues at the age of 77.

As a former bureaucrat, Marragon had an easy pen, and besides the *Mémoire* about fifty letters remain (Mauritius Archives, Ms TB 5/1), which were published and commented on by Lilian Berthelot (2002). These letters were written between 1795 and 1806 and were mostly addressed to the "*Citizen Director General of the French Establishments East of the Cape of Good Hope*" that is to say to Malartic, then to François Louis Magallon de la Morlière (1754–1825), who served as interim until the arrival of General Charles Mathieu Isidore Decaen (1769–1832), as well as to the Colonial Prefect Louis Léger (1748–1813). Other letters were exchanged with a settler, Jean Lambert Gautier, privateer and hydrographer, and owner of a ship, *Le Courrier de Rodrigue*. Marragon reproached him for, among other things, being too liberal with his black slaves. However, it appears from the testimony of some of the settlers and his own writings, that Marragon himself was particularly severe on them. He denounced the theft and fire attacks on the island, pointing out that the settlers "*will be allowed to shoot the runaway slaves.*" Admittedly he was a civil servant who was interested in the development of the island ; he wanted to prohibit the clearing of mountains, delineate the properties, and create public roads. He acknowledged that "*The bay of Port NE, where ships anchor, is quite large and welcoming to establish a village* [the future Port Mathurin] (...) *In the same bay there is a flat ground suitable to make a salt pan*" (Berthelot 2002: 53).

Marragon had other plans, and this second extract from the same letter of 19 Thermidor An X (6 August 1802) shows its dynamism, its authority, and its contemptuous disregard for the condition of black slaves "*Not having in Rodrigue most species of game, I am doing my best to introduce the hare, rabbit, partridge, guinea fowl and even deer. There are several very suitable islets to put them on, and two reasons for this decision, the first to avoid damage to crops, the second to protect from the wild cats those animals who can not defend themselves against this dangerous enemy. I dare to believe that you [will] agree that I prevent blacks from visiting these islets to prevent the destruction that surely they would do there. There are also many others* [islets] *for supplies of seabirds, which only they are attracted to, so they can do that very easily without going to where I will introduce those animals. I write this to make known this class of men: coming from Diego Garcia from where I brought sprouted Coconut trees with leaves, and planted them at the Port, they uprooted the majority to eat the shoot.*

On the rest day these blacks go to various parts of the island and have a mania for setting fire to places that are somewhat dry, which burns shrubs and young growing plants, and kills the tortoises which might be there, and this is one of the causes which has made them extremely rare. In principle the owner should answer for the actions of his blacks: therefore an article must also be precisely directed to the settlers, who must in addition refrain from going logging outside the land that was granted to them" (Berthelot 2002: 54). That is the last mention of tortoises alive[7], written seven years after the *Mémoire*, but is it based on observation, or an assumption?

We see here that Marragon went to Diego Garcia; he also knew the Seychelles, where he was almost appointed Civil Agent, perhaps also Saint-Brandon ("*Corgados*" = Cargados Carajos), because he planned to "*seize this Rock.*" A little later he planned to develop an oyster farming ... in Oyster Bay (Berthelot 2002: 92).

Shortly after his arrival on the Isle of France, in August, 1803, General Decaen was determined to order the evacuation of Rodrigues, because of the threat of the British navy. A deserted island could not provide food and water to their warships, and the planned establishment of a leper colony was another reason to deter landing. The settlers already installed were invited to settle on the Isle of France, and Marragon would become *Agent civil* in the Seychelles. This project did not satisfy anyone, and it failed. In December 1804 Marragon made a census, which showed that the island had 104 people, including 82 black slaves, and only five families of [white] settlers. In addition to Marragon, Le Gros and Gorry, there were Mathurin Bréhinier[8], and Etienne Rochetaing[9] with his family, arrived in 1801 and 1802 respectively. With other settlers and fishermen who remained a few months to a year or two (Gautier, Lecloud, Lostaud, Monnier, Quessy and Raffin), they were the target of repeated criticism from the *Agent civil*, who increasingly demonstrated his ambition to be the master of the island. So in 1806 only the first three families remained: Le Gros, Gorry and Marragon. A good example of how the relationship between the settlers became difficult is given in a letter from Rochetaing to the Prefect, dated 26 March, 1804: "*Mr. Eprefé* [Préfet = Prefect] (...) *Mr Marragon said I am not suited to fight against his pen - he is right because I do not even want to share his mind nor his conduct and behavior that he shows publicly* (...) *Also my pen has not been used as he did when sergeant of Royal comtois*[10] *against his chief Monsieur de la Motte writing libels because he was in dispute with his headquarters – he was put aboard in leg-irons and returned to France where he spent fifteen months in jail – then he was very fortunate that the Minister was replaced – In all countries of the world one should always respect one's superiors and their [natural] prerogatives, [for it is most inappropriate] to want to seek to understand whether they have right or reason in their conduct*" (Bertelot 2002: 82).

After Lieutenant-Colonel Henry Keating took possession of Rodrigues (4 August, 1809), Marragon took the oath of allegiance and he continued to informally ensure management of the island; the British commander raised him to the rank of Major in October 1810. He swore the oath again on 20 April 1818. The dates for his duties as a director or unofficial governor of the island are as follows: 12 May 1794 – 8 August 1809, after which the island was under British military administration until April 1812, when Marragon resumed his duties, until 4 November 1820, despite being absent for three years (1814-17) in the Seychelles. While there, he made several trips to Rodrigues aboard *La Séraphine* (the name of his daughter), captained by Le Gros. Returning via the Isle de France (by then again Mauritius), he left there on July 29, 1817 to go back to Rodrigues. In November 1820 Thomas Pye was given the title Civil Agent by the Governor of Mauritius, but his job was to register slaves and monitor shipping movement, without apparently any administrative authority, which probably remained effectively with Marragon until Pye left on 1 June 1823; Marragon remained at the helm until October 1825. Captaining *La Séraphine* himself, from 1819 to 1821 he made six back-and-forth

journeys between these two islands (North-Coombes and Lagesse 1990). In 1820 he was able to expand his property by a plot of 324 acres (137 ha) between Oyster Bay and Port Northeast (not yet named Port Mathurin), and tenure of île aux Fous[11] and île aux Crabes, to establish a fishery (Berthelot 2002: 155).

Philibert Marragon and Elisabeth Guillou Neuville had a daughter, Jeanne Charlotte Séraphine Marragon, born on Rodrigues about 1802, perhaps died on 21 July, 1835[12] at La Chaumière, Savanne, Mauritius. On 22 October 1827 in Port Louis (Mauritius) she married Charles Pierre François Pipon, born on 4 August 1799 in Port-Louis, died 23 June 1835 in Savanne. The couple had a daughter, Jeanne Henriette Charlotte Pipon, born about 1830, died 24 December, 1894 at La Chaumière, Savanne. On 29 December, 1850, in Savannah, she married Henri Pitot de la Beaujardière (1825–1883), who was President of the Chamber of Agriculture of Mauritius. The couple had three children who left living descendants: Anna (1852–1876), Alice (1854–1938), and Albert (1857–1918), author of *T'Eylandt Mauritius* (1905) – an interesting work on the first two centuries of history of Mauritius. At the present time the surname Marragon seems to have almost disappeared in France.

Philibert Marragon and his wife remained in Rodrigues until their deaths, in 1826, having spent 32 years of their lives on this island. By 1826, the population had barely increased, from the census of 1804 ; there were 123 inhabitants, including 100 slaves. Marragon died on 26 March at his home in *L'Orangerie*. His wife died shortly after, in October, and was buried beside him. The grave is still there, at a place called *L'Union* and was recently restored (Figure 6). The words on the headstone read "Ici Reposent M. Philibert Marragon decede en 1826 a l'age de 76 ans et son epouse Dame Elisabeth Guillou de Neuville decedee en Octobre 1826 a l'age de 61 ans. Ils furent les premiers cultivateurs de Rodrigues ou ils ont passe les 26 dern[ières] annees de leur vie."[13] Several things are wrong ; Elisabeth Guillou Neuville died at age 52, the Marragons were not the first farmers on Rodrigues, and they spent 32 years there, not 26.

FIGURE 6. Grave of Philibert Marragon Guillou and Elisabeth de Neuville in Union, Rodrigues. In 1995 (top left) – in 2011 (bottom left; right). The headstone was cleaned, flowers have changed…

ACCOUNT ON THE ISLE OF RODRIGUE

The *Mémoire sur l'Isle de Rodrigue* is written on 17 pages, preceded by a title page (Figures 7–11). The whole covers 10 sheets of 205 x 320 mm. It is signed and dated July 8, 1795[14], the same year as the original scientific description of the great Rodrigues tortoise (*Cylindrapis vosmaeri*) by Johann David Schoepff (1752–1800). When he wrote this memoir, at the request of the Captain General, Marragon had spent little more than a year on the island. He solicited and encouraged the new settlers; we know that subsequently he become somewhat of a megalomaniac and tried to discourage them, wishing to reign as master in Rodrigues. Jean François Dupon (1969) and Lilian Berthelot (2002) partially reproduced the *Mémoire*; here is how the former presented its content:

"*This description is that made by a settler, and represents, with a praiseworthy view of accuracy, the advantages and disadvantages of the place. The account begins with data on the position of the island, its dimensions, configuration of fringing reefs close to the East, becoming almost barrier reefs in the West. It continues with a description of anchorages, including that of the Northeast, close to a river continuously supplying water, which is the ea-*

FIGURE 7. Title, *Mémoire sur l'Isle de Rodrigue*.

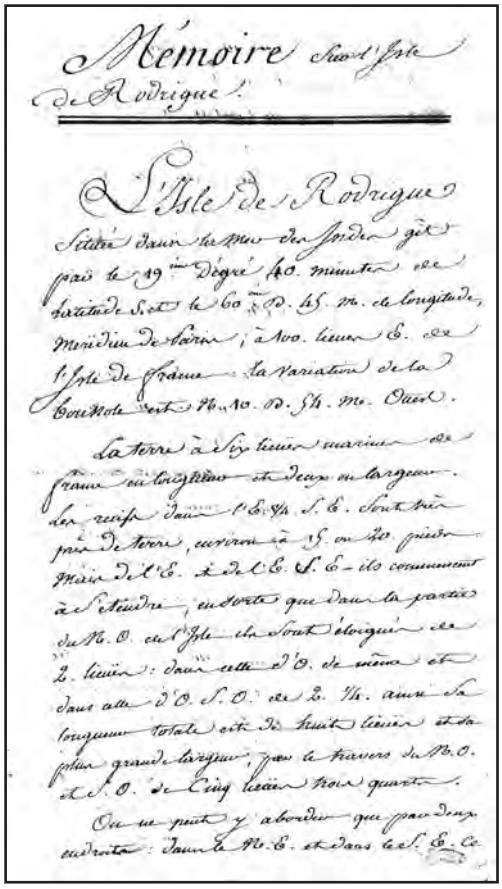

FIGURE 8. Page 1, *Mémoire sur l'Isle de Rodrigue* (Rodrigues)

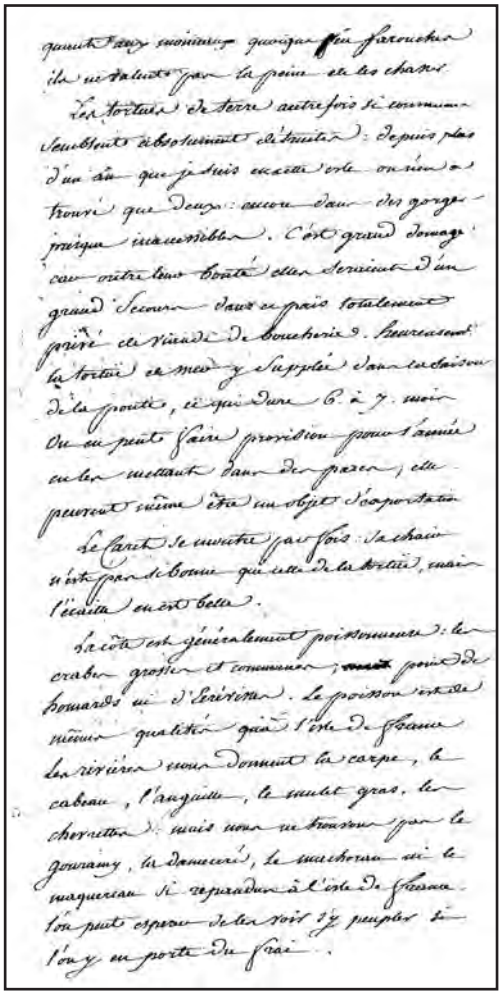

FIGURE 9. Page 10, *Mémoire sur l'Isle de Rodrigue* (tortoises).

siest access. This coastal site would suit itself, according to the author, to the establishment of a city and actually it is where the present capital, Port Mathurin, is installed. The anchorage is to be reached from the East along the reef, but care must be taken to avoid anchoring on the coral bottom of the Grand Pâté *at risk of cutting cables and losing anchors, the sea there being almost always high, mostly because of the permanence of easterly winds, as it was noted by all observers. The author then goes on, without embellishing reality, to the description of the interior and its resources. One*

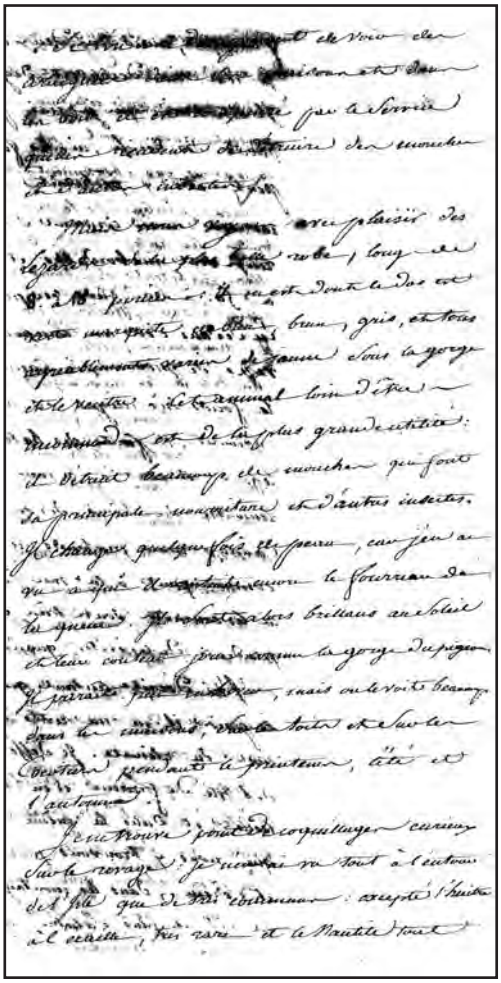

FIGURE 10. Page 15, *Mémoire sur l'Isle de Rodrigue* (lizards).

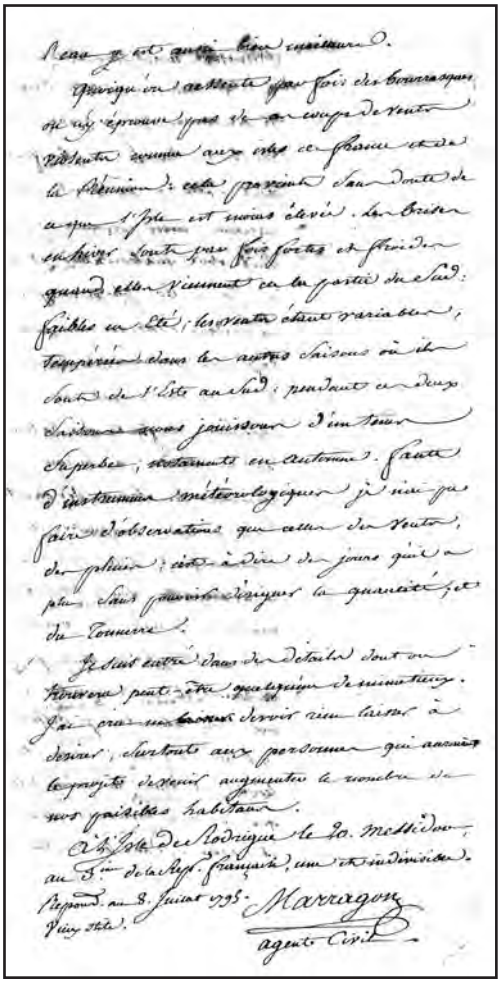

FIGURE 11. Page 17, *Mémoire sur l'Isle de Rodrigue* (date and signature).

sees confirmed through the text a number of constants about the agriculture of Rodrigues. The opposition of upland soils and 'swinging' alluvial clays, according to soil scientists, of large valleys. But also the range of major food crops that have survived until today and among the main ones are cassava, sweet potatoes and maize. Marragon's report also confirms the use made of latan palm for construction, which will contribute to the depletion of this tree. Among the fruit trees that appear to have been added to those reported by Pingré he lists oranges, limes and lemons, guava and rose apple, pineapple, tamarind, and date palms. The cabbage palms (including the poisonous species) are still common. But neither plantation crops nor livestock seem to have developed, although the old sugarcane plantations are evidence of previous trials. The coast, as well as rivers, remained full of fish, and fish are the same as on the Isle de France, with a few exceptions. The shark is very abundant and the author expresses the idea, taken today, of its industrial use. The dugong still frequents the shores of the island. The diverse range of seabirds, especially common in the islets, does not seem to have changed. The second part of the report is devoted to the disadvantages of the country. First, there are some animals and insects, including the centipede (Centpié) which is reported for the first

time. Among the disadvantages, Marragon added the difficulties in navigating the lagoon, due to the irregularity of the floor. The report concludes with a very brief overview of the climate that the author, without measuring instruments, could not scientifically analyze, also because his short stay on the island, which furthermore leads him to assume that the island is untouched by hurricanes. But perhaps that is a deliberate intention of the author to reassure potential candidates for settlement, which are called for by its conclusion."

NOTES

1 Subfossil is a well-accepted term for non-lithified bones from pre-historic periods.
2 In fact Pingré discovered their ability to change colour, which is an important observation, probably the first on colour-change ability in the genus *Phelsuma*.
3 Near Narbonne, not in Luc-sur-Aude, as written in all biographical notices.
4 Names of the father according to René Frédéric himself, in an autograph letter (Anon., s.d. 1); some genealogies give Pierre Léonard (e.g., Cercle généalogique de Bourbon, s.d.)
5 The English were blockading Mauritius and Réunion during the Napoleonic Wars The journey from Mauritius to Rodrigues was difficult against contrary winds, and ships often had to sail far to the south, go beyond Rodrigues and then return NW to reach the target (see Dupon 1969: 38, Cheke and Hume 2008: 292, note 11).
6 Often written Julienne. On the christening registration (City of Bréhan, 31 May 1736) the name and signature of his father are spelled Jullienne (Archives of Morbihan, civil status).
7 There is possibly another mention of tortoises by Marragon, in a letter dated 13 Pluviose an XII (3 February 1804): "Six months ago Citizen Rafain came with twenty blacks : since the scarcity of fish is obvious and we are loosing the important resource that are *tortues*". The French word *tortue* means either tortoises or turtles, hence an uncertainty, though mention in connection with fish suggests the latter. D. Rafain, or Raffin, was one of the "scapegoats" of Marragon; although recently established, he left Rodrigues at the end of 1803 or in January 1804.
8 Sent there by the Administration to build a boat, at the request of Marragon; the latter complained about the lack of enthusiasm put into this task by Bréhinier.
9 Rochetaing was a native of Bourbon; he was 55 years old. After trying to establish a coffee plantation, he left Rodrigues, at the end of 1805. North-Coombes (1971: 268; 1986: 8) pointed out that it is the same Rochetaing who wrote the report on the visit to Rodrigues caves by Captain Jean Roquefeuille de la Bistour on 1786 or 1789 ; during the trip "*we were on a mountain that leads to the pointe de Corail, we found a tortoise that we sent to our home*" (North-Coombes, 1986: 64).
10 Rochetaing meant the regiment Royal-Comtois (see above): he was obviously well aware of Marragon's past. The "*chefe Monsieur de la motte*" was Joseph Augustin Prosper Geffrard, Chevalier de la Motte (1729–1782), lieutenant-colonel of the regiment Royal Comtois on Isle-de-France. There were disputes with François Julien Des Roches du Dresnay or Desroches (1719-1784), Governor General of Bourbon and Isle de France Islands from 1769 to 1772. Following the uprising, La Motte was placed under arrest for three months, "*to have compromised the authority entrusted to him by the King*." On an earlier visit, La Motte wrote an interesting long report on the Ile de France (see Cheke and Hume, 2008: 99 and 429); it appears that Marragon must have 'shopped' La Motte to the French authorities (i.e. was against La Motte's uprising).
11 This must be the present île au Chat (or Pierrot), then called île aux Fous et Fouquets, rather than the northern île aux Fous, a simple rock.
12 According to genealogies (e.g., that proposed by Jean-Luc de Robillard: http://gw5.geneanet.org/robillard1), but this date may be in doubt because (1) a census of slaves dated 5 September 1838 indicates that Madame Pipon, owner of *L'Orangerie*, then owned 66 slaves (North-Coombes 1971: 77); (2) in his will dated 13 August 1840, Germain Gros bequeathed Séraphine Pipon all his estate except his property and slaves (North-Coombes 1971: 56; Berthelot 2002: 158).
13 "Here lie M Philibert Marragon deceased in 1826 aged 76 years and his wife Elisabeth Guillou de Neuville deceased October 1826 aged 61 years. They were the first cultivators of Rodrigues where they spent the last 26 years of their life".
14 In a marginal note Marragon added "*In July 1798 I sowed some coffee cherries: they came up after 40 days and bore fruit in November and December 1801*." This additional note was written at the earliest in 1802; Marragon probably completed his *Mémoire* during a visit to the Isle of France.

NB: page breaks in the manuscript of the *Mémoire* are indicated by numbers in square brackets.

MÉMOIRE SUR L'ISLE DE RODRIGUE

[1] L'Isle de Rodrigue située dans la mer des Indes gît par le 19ème Dégré 40. minutes de Latitude S. et le 60ème D. 45.m. de longitude, Meridien de Paris ; à 100. lieues E. de l'Isle de France : la variation de la boussole est N. 10. D. 54. m. Ouest.

La terre à six lieuës marines de France en longueur et deux en largeur. Les recifs dans l'E.¼.S.E. sont très près de terre, environ à 15. ou 20. pieds. Mais de l'E. et de l'E.S.E – ils commencent à s'étendre, en sorte que dans la partie du N.O. de l'Isle ils sont éloignés de 2. lieuës : dans celle d'O. de même et dans celle d'O. S.O. de 2.¼. ainsi sa longueur totale est de huit lieuës et sa plus grande largeur, par le travers du N.O. et S.O. de Cinq lieuës trois quarts.

On ne peut y aborder que par deux endroits : dans le N.E. et dans le S.E. Ce

[2] dernier passage est peu et même point fréquenté, non seulement par la difficulté de l'entrée asséz étroite et qui va en serpentant, mais plus encore par celle de la sortie, les vents regnant presque toute l'année de l'E. au S. et que d'ailleurs il n'y a point d'abri dans les différens mouillages du Canal. Celui du N.E. est infiniment plus facile et plus sur, et l'on peut en sortir en tout tems : aussi est-ce dans cette partie que les Etablissemens ont été formés.

La terre est bordée de promontoires qui forment des anses plus ou moins grandes et profondes, les unes pierreuses, les autres sablonneuses et toutes couvertes de bois divers : il n'y en a que peu qui manquent d'eau. Dans quelques unes elle est saumâtre : dans le S. et S.E. elle est excellente. Celle du Port N.E - est la plus grande : la plage est unie, sablonneuse et couverte d'herbe : elle a une rivière qui fournit en tout tems de bonne eau et présente un asséz beau terrein pour y former une ville.

[3] Le Chenal est asséz grand pour qu'un Vaisseau de 300. tonneaux puisse y entrer : ce n'est pas à cause du fonds qu'un plus grand n'y mouillerait pas, car il y a dix brasses d'eau, mais il est étroit et un gros Navire aurait de la peine à y virer de bord. Au devant du Chenal la rade est spacieuse : les recifs qui la bordent sont à pic et l'on pourrait moüiller tout auprès par six à dix brasses d'eau. Le fonds est de plusieurs espèces : de vase, de sable, corail, roches : il faut avec la sonde chercher le meilleur : mais il est essentiel d'éviter de moüiller sur le grand paté décrit dans l'atlas de D'Après. Le fonds en est généralement mauvais : rarement on en sauve les ancres : les cables qui se raguent sur le corail ou les roches peuvent mettre un Navire en danger si l'on n'a point dans ce cas une autre ancre parée, ou si l'on manquait de vent pour

MÉMOIRE SUR L'ISLE DE RODRIGUE

[1] The Isle of Rodrigue located in the Indian Ocean lies on the 19th Degree 40 minutes of S. Latitude and 60th D. 45 m. of longitude, Paris Meridian; 100 leagues E. of Isle de France: the variation of the compass is N. 10 D. 54 m. West.

The land is six marine leagues of France in length and two in width. The reefs in the E. ¼ S.E. are very close to the coast, approximately 15 or 20 feet. But from E. and E.S.E. they begin to expand, so that in the part of N.W. of the Isle they are 2 leagues distant; in the W. the same, and in the W.S.W. 2¼, therefore its total length is eight leagues, and its greatest width, across N.W. and S.W. five leagues and three quarters.

One can only land in two places: in the N.E. and in the SE. This

[2] second passage is rarely or not at all frequented, not only because the difficulty of the narrow meandering entrance, but even more by the exit, the winds prevailing almost all year from E. to S. and besides there is no shelter in the different anchorings of the channel. That of the N.E. is much easier and safer, and one can get away in all weathers: so it is in this part that settlements were established.

The land is bordered by headlands that form coves, of varying size and depth, some rocky, others sandy and all covered by various trees: only a few lack water. In some it is brackish; in S. and S.E. it is excellent. The bay of Port N.E. is the largest: the beach is level, sandy and covered with grass: it has a river that provides good water at all times and has a rather nice site suitable for building a town.

[3] The channel is large enough for a 300 ton vessel to enter: it is not because of the depth that a larger could not not be anchored there, because there are ten fathoms of water, but it is narrow and a big ship would have difficulty turning. In front of the channel the anchorage is spacious: the surrounding reefs drop sharply, and allow mooring very close at a depth of six to ten fathoms. The floor is of several materials: mud, sand, coral, rocks; one needs a probe to look for the best: it is essential to avoid anchoring on the *grand pâté* described in D'Après's atlas. The floor there is generally bad: one rarely saves anchors: the cables that chafe on coral or rocks can put a ship in danger if there is no other anchor dressed, or if there is a lack of wind to set sail: besides the sea is almost always rough and waves sometimes very high.

appareiller : d'ailleurs la mer y est presque toujours houleuse et parfois la lame très haute. On aborde ordinairemt. ce Port par l'Est : on range la côte le long du récif et l'on passe dans un

[4] Canal formé par un même recif du côté de la terre et par une pointe du grand paté, ayant soin d'éviter les bords sur lesquels on ne trouve que deux ou trois brasses d'eau. C'est par ce Canal que les Vaisseaux de guerre anglais ont passé pour venir moüiller dans la rade où ils nt resté dix jours dans leur relâche en avril et octobre 1794. v^{x}. s^{t}. –

Le Terrein dans la partie de l'Est continuellement battu des vents est sec, aride et dépouillé d'arbres : l'aspect même de l'Isle n'a rien d'attrayant ; herissée de promontoires nûs, escarpés on serait dégoûté à la première vuë de l'habiter : mais en la parcourant dans l'interieure, quoique le terrein ne soit pas regulier et orné de belles plaines, on ne laisse pas d'y trouver des morceaux susceptibles de culture, surtout depuis le travers de l'Isle par le N.E. et le S.E. jusqu'à l'O. Le païs à la verité est fort haché : il présente des monts fort âpres à côté de ravines roides, profondes et pierreuses : des forests épaisses et difficiles à pénetrer à cause des broussailles et des lianes : mais il y a des plateaux

[5] dont les terres sont très bonnes, ainsi que le penchant des Collines et c'est dans ces montagnes qu'il est préférable d'établir des plantations. Les intervalles sont d'une terre legère, brune, rougeâtre, profonde et peu pierreuse : on voit quelques parcelles de volcan ; du tuf gris asséz compacte pour faire des pierres à bâtir, quelques morceaux ferrugineux, mais en petite quantité. La terre des anses est au contraire une argile grasse et glissante dans les pluies : dure, compacte et qui se crevasse dans le tems sec, peu propre aux graines nourricières. Le soleil qui y darde ses rayons avec plus de force que dans le païs élévé : la chaleur concentrée par le circuit des promontoires brûlent les plantations avant leur maturité : cependant le manioc, les patates, Pistaches et autres racines ou gros légumes y viennent ; mais en général les anses ne sont tout au plus propres qu'à élever de la volaille et des troupeaux. Les bois qui s'y trouvent ne peuvent servir à rien : les uns étant spongieux, très sujets aux vers, les autres petits, tortueux et tout rabougris.

[6] L'Expérience nous a prouvé cette année que, dans les montagnes le blé donne 15 pour 1. ; l'arpent de terre 2000 £ de maïs; dix à douze livres de ris en ont produit environ Cinq cent, mais exquis. Les legumes de toute espèce y viennent bien : il est à présumer que tout réussira encore mieux, quand on aura travaillé les terres avec plus de soin qu'on n'a pu le faire d'abord et qu'on se sera délivré de quelques insectes.

Les bois de haute futaïe sont rares ; cependant nous en trouvons dans l'abatis que nous faisons de propres à la charpente et à la menuiserie. Il en est de très belles

One usually reaches this port by the East: one closely follows the coast along the reef and comes in through a

[4] channel formed by the same reef on the land side and by a point of the Grand Pâté, taking care to avoid the edges where are only two or three fathoms of water. It is through this channel that the British warships passed to anchor in the harbour where they spent ten days in their stop-over in April and October 1794 old style.

The land in the eastern part, continually beaten by winds, is dry, barren and stripped of trees: the very aspect of the island has nothing attractive; bristling with bare steep headlands; at first sight one would be disgusted to live here; but when roaming in the interior, although the ground is not regular and adorned with fine open areas, one can usually find areas suitable for agriculture, especially across the island from the N.E. and S.E. [and] over to the W. The country in truth is very craggy: it has very rough hills beside steep, deep and rocky ravines; forests thick and difficult to penetrate because of scrub and vines; but there are plateaus

[5] whose lands are very good, as are the slopes of the hills and it is in these mountains that it is best to establish plantations. The spaces between are of a light soil, brown, reddish, deep and somewhat stony; one sees some areas of volcanic rock; gray tuff compact enough to make building stone, some ferruginous pieces, but in small quantities. In contrast the earth in bays is a greasy clay, slippery when it rains, hard, dense and cracking in the dry season, poorly suited to grain crops. The sun beaming down there with more force than in the highlands, heat concentrated by the circuit of headlands burns plantations before they mature; however cassava, potatoes, peanuts and other roots or big vegetables grow here, but generally the bays are at best proper for rearing poultry and livestock. The woods therein are no use for anything: some are spongy, very vulnerable to worms, other small, tortuous and entirely stunted.

[6] Experience this year has shown us that in the mountains wheat gives 15 for 1; an acre of land 2,000 pounds of maize; ten to twelve pounds of rice produced about five hundred, but exquisite. Vegetables of all kinds here grow well: it is assumed that all will succeed even better when we will have worked the land with more care than we could do at first and when certain insects have been eliminated.

Tall trees are rare, but in the felling we have been doing we do find some suitable for carpentry and

couleurs de 18. à 22. pouces d'équarissage sur autant de /pieds de/ longueur ; d'autres de moindre largeur et de plus de longueur. Les bois tords sont asséz communs on en peut tirer de belles courbes. Les Lataniers, en très grande quantité, dont les tiges ont de 20. à 30. pieds de haut sur 5. à 8. pouces de diamètre, droites, fortes, asséz lisses, sont de la plus grande utilité pour construire en palissades. On peut donc se passer du secours des autres isles pour bâtir les logements les

[7] plus convenables. Quant aux bardeaux, faute d'outils nous n'en pouvons point faire et nous croyons même que le bois dont le fil ne paraît pas droit fendrait difficilement. À leur deffaut pour les couvertures des maisons, nous avons la feuille de latanier large, forte et qu'on attache sans cloux et sans cordes : étant séchée avant que de l'employer elle forme un toit impénétrable à la pluie et peut durer cinq à six ans et même plus.

Nous avons plusieurs arbres fruitiers : des Orangers dont le fruit est de la plus grande beauté : aussi sucré et le suc aussi abondant que les meilleurs du Portugal. Il y a des oranges amères propres pour les assaisonnemens : des Citrons jaunes et rouges, gros, pleins de jus doux et aigrelet : on en joüit toute l'année et calment agréablement la soif : il n'y en a point d'aigres, mais les limons très abondans y suppléent. Des Manguiers, attiers : goyaviers ; jamrosa, Bananiers : Ananas : Tamariniers : Cocotiers ; Dattiers et deux Pêchers. Le Palmiste est généralement repandu dans toute l'Isle : on le voit s'élever beaucoup au dessus des autres arbres : Plus mince que le

[8] latanier il donne un chou plus petit, mais plus doux et plus agréable au goût : il est de l'espèce qu'on appelle franc : s'il n'atteint pas à la bonté du palmiste épineux, il ne laisse pas d'être d'un bon usage à la table où on peut le servir crud, en salade, au jus, à la sauce blanche, frit à la poële et en bignets excellens. Sa tige est aussi bonne pour la construction que le latanier sur lequel elle a l'avantage d'être plus lisse et plus longue. Il est un arbre qui lui ressemble presque – parfaitement, mais le chou en est dangereux : les Noirs qui en ont mangé se sont trouvés étourdis, ensuite assoupis et cet état finit vingtquatre heures après par une diarrée.

Ayant trouvé des vieilles plantations de cannes à sucre, j'y ai fait mettre le feu pour dévorer les pailles seches ; les Cannes en sont venues très belles. Faute de baïes de Caffé /En Juillet 1798. j'ai semé quelques Cérises de Café : elles ont levé au bout de 40. jours et donné du fruit en 9^{bre} et X^{bre} 1801 – / nous ne pouvons éprouver quelle en serait la réussite, ainsi que de la muscade, de la canelle et du girofle ; nous présumons néanmoins que ces objets viendraient aussi bien qu'à l'isle de France.

Le C^{en} Gorry habitant de cette isle a fait une épreuve d'Indigo : quoique dénué

joinery. They include several of very beautiful colours 18 to 22 inches square and of the same length in feet; others are of lesser width but greater length. Twisted trees are quite common, from which we can make fine curves. The latan palms in very large quantities, which have straight, strong, rather smooth trunks 20 to 30 feet high and 5 to 8 inches in diameter, are most useful to build fences. We can therefore do without the help of other islands to build

[7] perfectly adequate housing. As for shingles, because of lack of tools we cannot make them and we even think that the wood with grain that does not appear straight would split with difficulty. Since these [shingles] are lacking for the roofs, we use the wide and strong latan palm leaves, which we attach without nails or strings; dried before use they make a roof resistant to rain and can last five to six years and even more.

We have several fruit trees: orange trees whose fruit is of great beauty; juice as sweet and abundant as the best in Portugal. There are bitter oranges for seasonings; yellow and red lemons, large and full of juice sweet and slightly sour: [these] we enjoy all year round and they delightfully quench the thirst: there are no really sour ones, but very abundant limes replace them. [There are also] Mango, custard-apple, guava; rose-apple, banana, pineapple, tamarind, coconut, dates and two kinds of peach-trees. The cabbage palm is widely spread throughout the island : one sees it rising well above the other trees: Thinner than the

[8] latan palm it gives a smaller cabbage, but sweeter and more palatable: it belongs to the common species; if it does not achieve the goodness of the spiny palm[1], it does not fail be of good use on the table, where one can serve it raw, as salad, with white sauce, fried in the pan and as delicious fritters. Its trunk is as good for building as the latan palm, over which it has the advantage of being smoother and longer. There is a tree that looks almost like it, but its cabbage is dangerous: blacks who ate it found themselves dizzy, then dozing, and this state ends twenty-four hours later by a diarrhoea.

Having found old plantations of sugar cane, I ordered them to be burned to consume the dry straw; the canes then came through splendidly. For want of coffee berries / In July 1798 I sowed some coffee cherries: they came up after 40 days and gave fruit in October and December 1801 - / we cannot experience what could be a success, as also for nutmeg, cinnamon and cloves; nevertheless we assume that these trees would grow as well [here] as on the Isle de France.

The Citizen Gorry inhabitant of this island made a test with Indigo: although devoid

[9] des facilités nécessaires pour la fabrication il est parvenu à en faire qu'on peut appeller bleu flottant : il en a envoyé un échantillon au C^en^ Saulnier au Port de la Montagne; je crois sans prévention qu'on le trouvera tel que je l'avance.

Dans l'espace de 6. à 7. mois j'ai planté et recolté du coton : il ne le céde pas en beauté à celui de l'Isle de France : on en peut juger par l'échantillon que j'envoie.

Le tabac croît de 5. à 6. pieds de haut : chaque tige porte de 15. à 18. feuilles amples, épaisses et glutineuses, il peut devenir un objet de commerce.

Les animaux de basse cour réussissent parfaitemt. on pourra les multiplier en augmentant la culture : car faute de maïs, leur principale nourriture, ils ne feraient que languir. Il y a des Cochons et des chèvres marrons d'une belle espéce : ce qui nous fait croire que les animaux domestiques réussiraient aussi bien : ils y seraient d'ailleurs très utiles, surtout les bêtes de somme quand les chemins seront applanis.

Nous n'avons point de bêtes fauves ni gibier : ni feroces. Les volatiles consistent en chauves souris grosses comme des pigeons ; en perroquets de même et en moineaux : tous bons à manger, surtout les chauves souris ;

[10] quant aux moineaux quoique peu farouches ils ne valent pas la peine de les chasser.

Les tortues de terre autrefois si communes semblent absolument détruites : depuis plus d'un an que je suis en cette isle on n'en a trouvé que deux : encore dans des gorges presque inaccessibles. C'est grand domage car outre leur bonté elles seraient d'un grand secours dans ce païs totalement privé de viande de boucherie. heureusement la tortuë de mer y supplée dans la saison de la ponte, ce qui dure 6. à 7. mois. On en peut faire provision pour l'année en les mettant dans des parcs ; elles peuvent même être un objet d'exportation.

Le Caret se montre parfois : sa chair n'est pas si bonne que celle de la tortuë, mais l'écaille en est belle.

La côte est généralement poissonneuse : les crabes grosses et communes ; points d'homards ni d'Ecrevisses. Le poisson est de mêmes qualités qu'à l'isle de France. Les rivières nous donnent la carpe, le cabeau, l'anguille, le mulet gras, les chevrettes : mais nous ne trouvons pas le gouramy, la dameceré, le machorau ni le maquereau si repandus à l'isle de France – l'on peut esperer de les voir s'y peupler si l'on y porte du frai.

[11] Le Requin fourmille : il nous procure par son foie de l'huile à brûler, qui peut encore être un objet de commerce.

Nous voyons parfois des Cétacées ; la baleine, l'Espadon, le Souffleur, le Lamentin viennent jusque dans le Chenal : faute de moyens nous ne pouvons courre sus pour en prendre.

[9] of facilities for manufacturing he managed to make what could be called floating blue: he sent a sample to Citizen Saulnier at Port de la Montagne[2]; I think without prejudice that it will be found as I claim.

In the space of 6 to 7 months I planted and harvested cotton: it yields nothing in its beauty to that of the Isle de France: one may judge by the sample I sent.

Tobacco grows from 5 to 6 feet high; each stem bears from 15 to 18 thick, wide and glutinous leaves; it can become an object of trade.

Farmyard animals succeed perfectly. We will be able to multiply by increasing the food crops: because without maize, their main food, they would just languish. There are feral pigs and a fine race of wild goats which makes us believe that domestic breeds would succeed just as well: they would be also very useful, especially beasts of burden when paths have been ameliorated.

We have no wild beasts nor game, neither ferocious [animals]. Winged creatures consist of bats as large as pigeons, parrots of the same size, and sparrows: all good to eat, especially the bats;

[10] as for the sparrows, although rather tame, they are not worth the trouble of hunting.

The land tortoises once so common seem to be completely destroyed: In the more than a year that I have been in this island only two have been found, and then in almost inaccessible gorges. This is a great shame because besides their goodness [to eat] they would be of great help in this country which is totally devoid of butcher's meat. Fortunately the sea turtles supply it in the nesting season, which lasts 6 to 7 months. One can make provision for the year by putting them in enclosures; they could even be an export item.

The hawksbill sometimes shows up: its flesh is not so good as the turtle's, but the shell is beautiful.

The coast is generally rich in fish: the crabs [are] big and common, [but there are] no lobsters or crayfish. The fish are of the same varieties as in the Isle of France. Rivers supply us with carp, *cabot* [river goby], eels, fat mullet, *chevrettes* [prawns]: but we do not find the *gouramy*, *dame Ceré* [goldfish], *machorau* nor mackerel[3] so widespread in the Isle of France. One can hope to see them thrive here if we bring spawn.

[11] Sharks abound: they provide us from their liver with oil to burn, which could also be traded.

We sometimes see Cetaceans; the whale, swordfish, blower dolphin, [and] dugong come right into the channel: we cannot chase and catch them because we lack the means.

Splendid and excellent oysters, hard to open, are

Les huitres belles et excellentes, difficiles à ouvrir, ne se trouvent plus que dans une baïe en bien petite quantité. Pour en prévenir la destruction totale, si la Colonie augmente, je serai obligé d'en renfermer dans des parcs.

Les islots situés dans l'enceinte des recifs sont couverts d'oiseaux de mer : le goulu noir, la frégate dont on tire une graisse si bonne contre la sciatique, le fouquet, le cordonnier, le fou, la goëlette blanche et la brune, le fétu-en-cul – tous ces oiseaux gras tant qu'ils sont jeunes, maigres et durs quand ils ont pris leur essor, qui ne se nourrissent que de poisson, ne sont pas de bon goût : il n'y a que les Noirs qui en mangent. Mais le Corbigeau, l'alouette de mer et un autre oiseau appellé ici le Crabier découragent de ceux là, quand on peut en prendre, car ils sont d'un accès difficile, on ne les a

[12] que par surprise.

Ayant décrit les avantages de cette isle, je dois rendre compte des inconvéniens qu'on y rencontre.

Les chats sauvages repandus dans tout le païs font la guerre aux animaux de basse cour : on s'en préserve en dressant des chiens à leur chasse : après quelques poursuites et quelques coups de fusil ils fuïent les lieux habités. Je n'ai pas de peine à croire qu'ils aient contribué à détruire les tortuës, même celles de mer, en déterrant les oeufs ou en mangeant les petits qui éclosent surtout lorsqu'ils se rendent à la mer où ils surnagent quelque tems le long du rivage avant que de plonger. J'y ai vu des chats au guêt prendre du poisson ; il n'est pas étonnant qu'ils enlèvent les tortuës naissantes.

Des souris, des rats ; on n'a pas plûtôt fait un logement qu'ils viennent l'habiter en même tems que le maître. Ils échappent à la griffe des chats en se nichant dans des troncs d'arbre ou dans des terriers. Pour m'en délivrer autant qu'il est possible j'ai des petits chats sauvages que j'ai apprivoisés et qui les prennent bien.

On voit plusieurs espéces de chenilles ;

[13] de blanches, de vertes, de brunes et veluës ; elles rongent les feuilles de toutes les plantes, jusqu'aux patates errantes au bord de la mer. Elles ne sont pour ainsi dire que passagères se transformant en papillon après avoir été en chrysalide ; mais elles causent toujours du domage, notament au jardinage.

Beaucoup de mouches dans le tems des chaleurs. Il en est une verte qui vole au poisson que l'on sale, y dépose un millier d'oeufs qui en 24. heures grossissent et forment des vers comme le doigt. Nichés une fois entre l'écaille et la chair ils se transforment au bout de quelques jours en d'autres mouches noires ressemblant aux scarabées.

La volaille, surtout les canards, mangent les chenilles : on détruit les papillons en allumant le soir des petits feux où ils viennent se brûler ; c'est ainsi qu'on

found in very small quantities in one bay only. If the colony increases, I will have to confine them in enclosures to stop them being wiped out.

The islets located within the reefs are covered by seabirds: the black glutton [or] frigate from which one extracts a good grease against sciatica, *fouquet* [shearwater], *cordonnier* [noddy], *fou* [booby], white and brown *goëlette* [terns], *fétu-en-cul* [tropic-bird] – all these birds fat while they are young, lean and hard after fledging. They eat only fish, so do not taste good: only the Blacks eat them. But the *corbigeau* [whimbrel], *alouette* [small shorebird] and another bird here called *crabier* [striated heron] make up for the others, when one can take them, because they are difficult to get at: one catches them

[12] only by surprise.

Having described the benefits of this island, I must report the inconveniences found there.

Feral cats, widespread throughout the land make war on farmyard animals: we protect ourselves from them by training dogs to hunt them: after some chases and a few gunshots they flee from inhabited places. I have no difficulty in believing that they have contributed to the destruction of the tortoises, even turtles, by digging up the eggs or eating the hatchlings, especially when going to the sea, where they float for a while along the shore before diving. I have seen cats watching for and catching fish: it would not be surprising if they take hatching turtles.

Of mice, of rats; as soon as one builds a house they come there to live at the same time as the owner. They escape the claws of cats by nesting in tree trunks or in burrows. To deliver myself from them as much as possible I have wild kittens that I tamed and who catch them well.

We see several species of caterpillars:

[13] white ones, green ones, brown ones and hairy ones - they eat the leaves of all plants, even the creepers[4] along the seashore. They are actually so to speak only there in passing, changing into a moth after being a chrysalis, but they always cause damage, especially to [kitchen] gardens.

[There are] Many flies in the hot season There is a green one which flies onto the fish being salted, [and] lays there a thousand eggs which grow in 24 hours making worms as big as a finger. Once nestled between the scale and the flesh in a few days they become another [sort of] black flies resembling beetles.

Poultry, especially ducks, eat the caterpillars; moths are destroyed by lighting small fires in the evening to which they come and burn themselves; it

en diminue la quantité. Pour sauver le poisson de la mouche, quand le soleil n'en sèche pas la /ponte/, le plus court est de l'enlever.

Il y a des sauterelles, des grillons et autres petits insectes qui ne laissent pas d'être destructeurs. L'introduction de l'oiseau martin en délivrerait la Colonie.

Je n'ai encore vu qu'un Centpié d'environ

[14] trois pouces de long : quelques petits scorpions et une mouche appelée vulgairement punaise à maupin : tout cela ne nous a causé jusqu'à présent aucun mal, et nous avons l'avantage de n'avoir pas absolument des punaises de lit.

Les crabes de terre foisonnent dans toutes les anses : c'est un animal amphibie : elles habitent des trous profonds, moitié pleins d'eau, qu'elles se creusent au bord des ruisseaux ; celles qui avoisinent les plantations les endomagent un peu : on les appelle à l'isle de France, tourelourou. Il y en a au bord de la mer de petites de deux espéces : l'une grise, l'autre rouge qui ne font aucun mal : mais parmi les rouges il y en a de veluës qu'on dit être mauvaises.

Quant aux fourmis il n'y a pas dans toute l'isle le moindre espace de terre qui n'en soit infesté. La culture pourra peut-être les diminuer, mais en attendant elles incommodent beaucoup et rongent même les grains semés.

Nous avons le kakerlaque semblable à celui de l'Isle de France : je n'ai pas encore vu son ennemi la guêpe Ichneumone. Pour s'en délivrer quand on en déniche, on les pousse vers la volaille qui ne leur fait pas quartier.

[15] Si l'on a le désagrément de voir des araignées dans les maisons et dans les bois, il est compensé par le service quelles rendent de détruire des mouches et d'autres insectes.

Mais nous voyons avec plaisïr des Lézards de la plus belle robe, longs de 8. à 10. pouces : il en est dont le dos est vert marqueté de bleu, brun, gris, et tous agréablement variés de jaune sous la gorge et le ventre. Cet animal loin d'être incommode est de la plus grande utilité : il détruit beaucoup de mouches qui font sa principale nourriture et d'autres insectes. Il change quelquefois de peau, car j'en ai vu à qui il restait encore le fourreau de la queue. Ils sont alors brillans au soleil et leur couleur joue comme la gorge du pigeon. Il paraît peu en hiver, mais on le voit beaucoup dans les maisons, sur les toits et sur les Cocotiers pendant le printems, l'été et l'automne.

Je ne trouve point de coquillages curieux sur le rivage : je n'en ai vu tout à l'entour de l'Isle que de très communs : excepté l'huitre à l'écaille, très rare et le Nautile tout

[16] fracassé, mais tous deux d'une belle nacre, je n'ai rien découvert digne d'un Cabinet. Il est vrai

is thus that we have reduced their quantity. To save the fish from the fly, when the sun does not dry out the / egg cluster /, the quickest [way] is to remove it.

There are grasshoppers, crickets and other small insects that do not leave off being destructive. The introduction of the *martin* [myna bird] would deliver the colony.

I have seen only one *centpié* [centipede] about

[14] three inches long; some small scorpions and a flying insect commonly called *punaise à maupin*: this has caused us no trouble so far, and we have the advantage of the total absence of bedbugs.

Land crabs abound in all bays: it is an amphibious animal; they live in deep holes, half full of water, that they dig along rivulets; those near crops damage them a little: at the Isle of France we call them *tourelourou*. At the seaside there are small [crabs] of two species: one gray, one red that do no harm: but among the red there are hairy ones said to be bad [to eat].

As for the ants there is in the island not an inch of land that is not infested. Farming will be perhaps reduce them, but meanwhile they are a major nuisance and even gnaw sown grains.

We have cockroaches similar to those on the Isle of France; I have not seen yet their enemy the ichneumon wasp. To get rid of them when discovered, we drive them towards poultry, which give them no quarter.

[15] If we have the inconvenience of spiders in the house and in the woods, it is balanced by the service they do in destroying flies and other insects.

But we are pleased to see lizards with the prettiest coat, from 8 to 10 inches long; in some the back is green, flecked with blue, brown, gray, and all pleasantly varied with yellow under the throat and belly. This animal, far from being inconvenient is most useful: it destroys many flies that are its main food, and [also] other insects. Sometimes it changes its skin, because I have seen some on which the sheath was still on the tail. They appear brilliant in sunlight and their color shimmers like a pigeon's throat. Few appear in winter, but many can be seen in homes, on rooftops and on coconut trees during the spring, summer and autumn.

I find no curious shells on the shore: I have only seen all around the isle the very common ones; except for the oyster shell, very rare and the Nautilus, very

[16] shattered, but both of a beautiful mother-of-pearl; I did not find anything worthy of collection. It

que je n'ai pas sondé les bords des recifs, ni les fonds en dehors, peut-être y pêcherait-on quelque beau morceau : mais comment s'y prendre, les recifs sont inabordables et en dehors il y a 50. à 60. pieds de profondeur ?

En dedans c'est un composé de sable, de vaze, de pierres, de Corail, de madrepores : le fonds très inégal est asséz difficile à parcourir, il faut des bateaux plats et legers et aller à la mer pleine. On rencontre des trous, des cavités des petits Canaux mais profonds : il y en a qui communiquent à la mer à travers les recifs : là les courants sont très sensibles ; il est prudent de les éviter quand la marée descend.

J'ai décrit autant qu'il est en moi ce païs, il ne me reste à dire qu'un mot du climat. Il diffère peu de celui de l'Isle de France n'en étant qu'à 100 – lieues et dans la même latitude : l'air que nous y trouvons plus frais est pur et serein, dans les montagnes surtout il est vif et plus salubre que dans les anses

[17] l'eau y est aussi bien meilleure.

Quoiqu'on ressente parfois des bourrasques on n'y éprouve pas de ces coups de vent violents comme aux isles de France et de la Réunion : cela provient sans doute de ce que l'Isle est moins élevée. Les brises en hiver sont par fois fortes et froides quand elles viennent de la partie du Sud : faibles en Eté ; les vents étant variables ; tempérés dans les autres saisons où ils sont de l'Est au Sud : pendant ces deux saisons nous joüissons d'un tems superbe, notamment en automne. Faute d'instruments météorologiques je n'ai pu faire d'observations que celles des vents, des pluies ; c'est-à-dire des jours qu'il a plu sans pouvoir désigner la quantité ; et du Tonnerre.

Je suis entré dans des détails dont on trouvera peut-être quelqu'un de minutieux. J'ai cru ne ~~laisser~~ devoir rien laisser à desirer, surtout aux personnes qui auraient le projet devenir augmenter le nombre de nos paisibles habitans.

A l'Isle de Rodrigue le 20. messidor an 3ème de la Rep. Française, une et indivisible. Repond au 8. Juillet 1795. Vieux stile.

Marragon
Agent Civil

is true that I have not probed the edges of reefs nor the outer depths, perhaps there one would fish up a nice piece; but how to do it, it is impossible to land on the reefs; beyond them it is 50 to 60 feet deep?

Inside [the reef] [the lagoon] consists of sand, mud, stones, and coral[5]. The very unequal bottom is quite difficult to navigate, you need light, flat-bottomed boats and to travel at the high tide. One can encounter holes, cavities, small but deep channels: some communicate to the sea through the reefs; the currents there are very noticeable, it is wise to avoid them when the tide goes out.

I have written all I can about this country, it only remains for me to say a word about the climate. It differs but a little from that of the Isle de France, situated only 100 leagues away and at the same latitude. The air that we find freshest is pure and calm; especially in the mountains it is crisp and more salubrious than in the bays.

[17] Water is also much better [than in the Isle de France].

Though sometimes one feels strong gusts, we do not experience here the violent wind storms as in the Isles of France and Reunion: this is probably because the island is lower. In winter breezes are sometimes both strong and cold when they come from the south; [they are] light in summer, the winds being variable [in direction]; moderate in other seasons when they are from South to East: during these two seasons we enjoy splendid weather, especially in autumn. Lacking meteorological instruments, I could only make observations on winds and rains, that is to say, the days it rained without specifying the amount, and on thunder.

I went into the details which one may find somewhat meticulous. I thought I should not leave out anything useful, especially for people who might plan to come and increase the number of our peaceable inhabitants.

At Rodrigue island on 20 Messidor Year III of the French Republic, one and indivisible. Agrees with 8 July 1795. Old style.

Marragon
Civil Agent

NOTES on the *Mémoire*:

1 *Acanthophoenix rubra*, a palm-tree endemic to Mauritius and Réunion.
2 Port-de-la-Montagne: name of Port-Louis, Mauritius, from 1792 to 1795.
3 Machorau and maquereau are simply two spellings of the same local name, now makro in Mauritian creole (Baker and Hokoomsing 1987); however apparently these days it only applies to species of sea-fish; it is thus impossible to say what fish Marragon was referring to.
4 Maragon's patates is short for patates à Durand, the shoreline creeper *Ipomoea pes-caprae*; it is in the same genus as the sweet potato *I. batatas*, hence the local name.
5 Corail and madrépore are synonyms, hence only one is retained in the English version.

Table 1. – Indigenous species of the Rodrigues fauna mentioned in Marragon's "Mémoire". Rodriguan Creole names, scientific names, English and French common names. Mainly according to Cheke 1982; Moore and Guého 1984; Cheke 1987; Staub 1993; Keith et al. 2006; Cheke and Hume 2008; Lewis et al. 2010. Non-specific faunal mentions by Marragon (shore crabs, ants, spiders etc.) not included.

Name in Marragon	Scientific name	Creole name	English name	French name	Observation
MAMMALS					
Chauves-souris	*Pteropus rodricensis* Dobson, 1878	Sossouri, susuri	Golden (fruit) bat, Rodrigues flying-fox	Roussette, Renard volant (de Rodrigues)	**Endemic**. Nearly extinct around 1972, but has recovered well. Also thriving in captivity
Baleine	*Megaptera novaeangliae* (Borowski, 1781)	Balen	Humpback whale	Baleine à bosse, Jubarte	
Souffleur	*Tursiops truncatus* (Montagu, 1821)	Soufler	Bottlenose dolphin	Souffleur, Grand dauphin	
Lamentin	*Dugong dugon* (Müller, 1776)	(Lamañtiñ)	Dugong, Sea-cow	Dugong, Vache marine	Vanished, last mention by Marragon
BIRDS					
Alouette de mer	Scolopacidae; *Calidris*, *Arenaria*…	Zalwet, Kordonye	Migrant waders	Petits échassiers migrateurs: bécasseaux, tournepierres, etc.	Migrant from the Northern Hemisphere
Corbigeau	*Numenius phaeopus* (Linnaeus, 1758)	Korbizo	Whimbrel	Courlis corlieu	Migrant from the Northern Hemisphere
Cordonnier	*Anous stolidus* (Linnaeus, 1758); *Anous tenuirostris* (Temminck, 1823)	Malen	Lesser, sooty noddy; Brown, common noddy	Noddi Marianne; Noddy brun	Still breed on islets in the lagoon
Crabier	*Butorides striatus* (Linnaeus, 1758)	Begas	Little green heron, striated heron	Héron strié, Butor, Blongios	The only surviving native freshwater bird species
Fétu-en-cul	*Phaeton rubricauda* Boddaert, 1783; *Phaeton lepturus* Daudin, 1802	Payañke	Tropic bird, red-tailed; Tropic bird, white-tailed	Paille-en-queue à brins rouges; Paille-en-queue à bec jaune	Rare, less than 100. Fairly stable numbers
Fou	*Sula sula* (Linnaeus, 1766); *Papasula abbotti* (Ridgway, 1893)	Fu Bef	Red-footed booby; Abbott's booby	Fou à pieds rouges; Fou d'Abbott	Vanished before 1914 Vanished around 1835

Table 1. – *continued...*

Name in Marragon	Scientific name	Creole name	English name	French name	Observation
Fouquet	*Puffinus pacificus* Gmelin, 1789	Fuke	Wedge-tailed shearwater	Puffin (fouquet)	Rare, less than 100
Frégate	*Fregata ariel* (Gray, 1845)	Fregat	Frigate bird (lesser)	Frégate (petite)	Vanished from Mascarenes; *F. minor* possibly also present
Goëlette blanche	*Gygis alba* (Sparrman, 1786)	Golet	Fairy tern, White tern	Goélette blanche, Oiseau la Vierge	Rare, less than 100 (on aux Sables and Coco islets)
Goëlette brune	*Sterna fuscata* Linnaeus, 1766 [= *Onychoprion fuscatus* (Linnaeus, 1766)]	Golet	Sooty tern	Goélette brune, Sterne fuligineuse	Formerly abundant, wiped out by over-haresting of eggs, but recolonised in small numbers from 1985.
Goulu noir	*Fregata ariel* (Gray, 1845)	Fregat	Frigate bird (lesser)	Frégate (petite)	= Frigate
Moineau	*Foudia flavicans* Newton, 1865	Seriñ zon'	Fody (Rodrigues)	Foude, Foudi (de Rodrigues)	**Endemic**. Nearly extinct in 1972, but has recovered well: well over 300 pairs
Perroquet	*Psittacula exsul* (Newton, 1872)	Kato ver	Rodrigues (green) parakeet	Perruche verte de Rodrigues	**Endemic**. Extinct around 1880
REPTILES					
Caret	*Eretmochelys imbricata* (Linnaeus, 1766)	Kare	Hawksbill	Caret, Tortue à écailles	Very rare today, but still nesting (Fretey et al., 2013)
Lézard	*Phelsuma edwardnewtonii* Vinson and Vinson, 1969	Lezar	Day gecko (Rodrigues)	Lézard vert diurne (de Rodrigues)	**Endemic**. Last specimens collected in the early 1900s. Extinct before 1920
Tortuë de mer	*Chelonia mydas* (Linnaeus, 1758)	Torti dmer	Green turtle	Tortue franche (ou verte)	Rare today
Tortue de terre	*Cylindraspis vosmaeri* (Suckow, 1798); *Cylindraspis peltastes* (Duméril and Bibron, 1835)	Torti	Rodrigues tortoises	Tortues terrestres (de Rodrigues)	**Endemic**. Extinct around 1800. Last mention of living tortoises made by Marragon

Table 1. – *continued...*

Name in Marragon	Scientific name	Creole name	English name	French name	Observation
FISHES					
Anguille	*Anguilla bicolor* McClelland, 1844; *Anguilla marmorata* Quoy and Gaimard, 1824	Añgi, Zañgi	Eel	Anguille	*A. marmorata* became extinct after the drought of the 1970s (dry rivers)
Cabeau	*Awaous commersoni* (Schneider, 1801) and/or *Eleotris fusca* (Schneider and Forster, 1801)	Kabo, Los Kabo nwar	River goby Dusky sleeper	Loche, cabot Eléotris brun	Both species vanished from rivers after the drought of the 1970s, but *A.commersoni* has since been rediscovered in brackish waters
Carpe	*Kuhlia (*ex-*Dules) rupestris* (Lacepède, 1802); *Kuhlia caudavittata* (Lacepède, 1802)	Karp (dilo du) "Doule de mer" ? = Dil demer	Rock flagtail, Jungle Perch; —	Doule de roche Doule à queue rayé	*K. rupestris* vanished after the drought of the 1970s; *K. caudavittata* is more estuarine and may have survived
Espadon	*Xyphias gladius* Linnaeus, 1758	Espadoñ	Swordfish	Espadon	
Mulet gras	*Mugil cephalus* Linnaeus, 1758	Mile	Flat-headed mullet	Mulet bleu, Muge	
INVERTEBRATES					
Chevrette	*Macrobrachium australe* (Guérin-Méneville, 1838); *Macrobrachium lar* (Fabricius, 1798)	Sevret'; Kamaroñ	River prawn	Chevrette; Camaron	Both species vanished after the drought of the 1970s
Centpié	*Scolopendra subspinipes* Leach, 1815; *Scolopendra morsitans* L. 1758	Sañ-pye	Centipede	Mille-pattes	Introduced species, later iconic of Rodrigues, first mentioned by Marragon; both nearly extinct on the main island, since the introduction of the shrew *Suncus murinus* (Linnaeus, 1766) in 1997 (Lewis et al. 2010)
Crabe de terre, Tourelourou	*Cardisoma carnifex* (Herbst, 1794); *Cardisoma (=Discoplax) hirtipes* Dana 1852	Krab, Krap, Turluru, Trululu	Land crab	Crabe terrestre	Incredibly numerous in the 18th century (Pingré 1763), but now much reduced

Table 1. – *continued...*

Name in Marragon	Scientific name	Creole name	English name	French name	Observation
Nautile	*Nautilus pompilius* Linnaeus, 1758	(Notil)	Chambered nautilus	Nautile	Beached shells
Punaise à Maupin *	*Triatoma rubrofasciata* (De Geer, 1773)	Pinez mopeñ	Assassin bug	Punaise (Réduve)	Pantropical. Blood-sucking (Heteroptera: Reduviidae)

* Nicolas de Maupin (dates unknown) succeeded Pierre Benoît Dumas (1668–1745) as governor of the Isle de France. He arrived on 20 April 1729. In 1731 Maupin choose Port-Louis as the main harbour and capital of the island. He was a man of violent character, belligerent and libertine and the French settlers disliked him. On 4 June 1735 Maupin was succeeded as governor by Bertrand François Mahé de Labourdonnais (1699–1753), and left the Isle de France on 28 December 1735. There was certainly a kind of revenge when the settlers coined the name *punaise (à) Maupin*. Bernardin de Saint-Pierre, in 1773, already mentioned this insect "*Il y a ... une punaise maupin. Sa piquure est plus dangereuse que celle du scorpion ; elle est suivie d'une tumeur de la grosseur d'un œuf de pigeon qui ne se dissipe qu'au bout de cinq ou six jour*s" (see Mamet 1993). However, the *punaise à Maupin* of Marragon is said to be a sort of fly, apparently harmless (unlike the assassin bug): it could be another species. "Mouche" was in Mauritius a general term for flying insect (e.g. bees and wasps are also "mouche" / *mus* in creole), so Marragon's *punaise* was not necessarily a fly (Diptera); however, given that it seems to have been harmless, he may have used the (rather precise) name for a superficially similar Hemipteran.

Table 2 – Indigenous species of the Rodrigues flora mentioned in Marragon's "Mémoire". Mainly according to Strahm 1989; Moore and Guého, 1984.

Name in Marragon	Scientific name	Creole name	English name	French name	Observation
Patates errantes au bord de la mer	*Ipomoea pes-caprae* (Linnaeus, 1753) R. Brown, 1816	(lian) Batatrañ	Beach morning glory	Patate à Durand (Réunion)	Pan-tropical shoreline creeper
Latanier	*Latania verschaffeltii* Lemaire 1859	Latanye	Rodrigues Latan Palm	Latanier de Rodrigues	**Endemic**; now very rare in the wild
Palmiste	*Dictyosperma album* var. *aureum* Balfour 1877	Palmis (boñ)	Mascarene Cabbage Palm	Palmiste blanc	**Endemic** subspecies; only 2 wild specimens survive
"tree that looks almost like it [Palmiste] but its cabbage is dangerous"	*Hyophorbe verschaffeltii* H.Wendland 1866	Palmis marroñ	Rodrigues poison palm	Palmiste poison de Rodrigues	**Endemic**; now very rare in the wild

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REFERENCES

Anon., s.d. 1. Archives nationales d'Outre-Mer, Fr Anom Col E 216. Guillou de Neuville, René Frédéric, commissaire inspecteur de police à l'île de France. http://anom.archivesnationales.culture.gouv.fr/ark:/61561/up424xzuuqk.num.

Anon., s.d. 2. Cercle généalogique de Bourbon, Les originaires de : Région Bretagne. http://www.cgb-reunion.org/histoire/35_ille__vilaine.htm.

Arnold, E. N., 1979. Indian Ocean giant tortoises: their systematics and island adaptations. *Philosophical Transaction of the Royal Society, London*, (B), **286**: 127–145.

Austin, J. J. and E. N. Arnold, 2001. Ancient mitochondrial DNA and morphology elucidate an extinct island radiation of Indian Ocean giant tortoises (*Cylindraspis*). *Proceedings of the Royal Society, London*, B **268**: 2515–2523.

Austin, J. J., E. N. Arnold and R. Bour, 2002. The provenance of type specimens of extinct Mascarene Island giant tortoises (*Cylindraspis*) revealed by ancient mitochondrial DNA sequences. *Journal of Herpetology*, **36**: 280–285.

Baker, P. and V. Y. Hookoomsing, 1987. Diksyoner kreol morisyen / Dictionary of Mauritian Creole. Paris, L'Harmattan. 1–365.

Barassin, J., 1978. Antoine Boucher. Mémoire pour servir a la connoissance particulière de chacun des habitans de l'isle de Bourbon [divisés par les quartiers qu'ils habitent]. Aix-en-Provence, A.C.O.I. – I.H.P.O.M. 1–447. [New edition: Sainte-Clotilde, Réunion, 1989].

Berthelot, L., 2002. La petite Mascareigne : aspects de l'histoire de Rodrigues. Port-Louis, Centre Nelson Mandela pour la Culture Africaine. i–vii, 1–255.

Boulenger, G. A., 1884. Note upon a large lizard of the genus *Phelsuma*, from Rodriguez, sent by Mr. J. C. O'Halloran. *Proceedings of the Zoological Society of London*, 1884 : 1–2.

Bour, R., 1985 ('1984'). Les Tortues terrestres géantes des îles de l'océan Indien occidental: données géographiques, taxinomiques et phylogénétiques. *In:* F. de Broin and E. Jimenez-Fuentes (éds.), *Studia Palaeocheloniologica* I. Ediciones Univ. Salamanca, *Studia Geologica Salmanticensia*, Vol. especial **1** [1984]: 17–76.

Bousquet, R., 2011. Dans la Chambre du Conseil. Recueil de documents pour servir à l'histoire des esclaves de Bourbon (La Réunion) tirés du Registre des arrêts du Conseil Supérieur de l'île. Saint-Denis. 1724-1733. 1–288. Website: http://www.reunion-esclavage-traite-noirs-neg-marron.com/spip.php?rubrique4.

Cheke, A. S. 1982. Les noms créoles des oiseaux dans les îles francophones de l'océan Indien. Paris, Institut international d'Ethnosciences. 1–64.

Cheke, A. S., 1987. An ecological history of the Mascarene Islands, with particular reference to extinction and introduction of land vertebrates. *In*: A. W. Diamond (ed.), Studies of the Mascarene Islands Birds. Cambridge, Cambridge University Press. 5–89.

Cheke, A. S. and J. P. Hume, 2008. Lost Land of the Dodo. An ecological history of Mauritius, Réunion and Rodrigues. London, T. and A.D. Poyser. 1–464, 16 pl.

Dupon, J. F., 1969. Recueil de documents pour servir à l'histoire de Rodrigues. *Mauritius Archives Publications*, Port-Louis, n°10: 1–100, cartes 1–2, pl. 1–3.

Dupon, J. F., 1974. Relation de l'isle Rodrigue. Text attributed to Tafforet, *circa*. 1726. *Proceedings of the Royal Society of Arts and Sciences of Mauritius*, **4**, 1: 1–16, pl. 1–4.

Fretey, J., T. Frétey, A. Dupré, J. Dupré, A. Anquetil and A. Meunier, 2013. Is the Hawksbill Turtle, *Eretmochelys imbricata*, a Regular Nester on Rodrigues Island (Indian Ocean)? *Marine Turtle Newsletter*, **138**: 22–24.

Hoarau, S., M.-P. Janiçon and J.-M. Racault, 2004. Voyage à Rodrigue, le transit de Vénus de 1761 : la mission astronomique de l'abbé Pingré dans l'océan Indien. Paris, Éditions Orphie. 1–373.

Jauze, J.-M., 1998. Rodrigues, la troisième île des Mascareignes. Paris, L'Harmattan – Saint-Denis, Université de La Réunion. 7–269.

Keith, P., G. Marquet, P. Valade, P. Bosc and E. Vigneux, 2006. Atlas des poissons et des crustacés d'eau douce des Comores, Mascareignes et Seychelles. Paris, MNHN (Patrimoines Naturels n° 65). 1–250.

Leguat, F., 1707. Voyages et avantures de François Leguat et de ses compagnons en deux îles désertes des Indes orientales. Volumes 1 et 2. Londres, David Mortier: i–xxvi, 1–164, 1–180, 31 pl., 1 carte. [dated 1708, but published in 1707].

Lewis, J. G. E., P. Daszak, C. G. Jones, J. D. Cottingham, E. Wenman and A. Maljkovic, 2010. Field observations on three scolopendrid centipedes from Mauritius and Rodrigues (Indian Ocean) (Chilopoda: Scolopendromorpha). *International Journal of Myriapodology* 3: 123-137.

Lougnon, A., 1932. Ce que valait Bourbon en 1722. *Recueil trimestriel de documents et travaux inédits pour servir à l'histoire des Mascareignes françaises*. **1**: 23–29, 31–35, 61–70, 94–98.

Lougnon, A., 1933. Correspondance du Conseil supérieur de Bourbon et de la Compagnie des Indes 10 mars 1732 – 23 janvier 1736. Saint-Denis, imprimerie Drouhet. i lxviii, 1–381.

Lougnon, A., 1956. L'île Bourbon pendant la Régence. Desforges Boucher. Les débuts du café. Paris, Larose. 1–371, pl. 1–11.

Lougnon, A., 1958. Le mouvement maritime aux îles de Bourbon et de France pendant les premières années du règne personnel de Louis XV (1725–1735). Nérac, imprimerie Couderc. 1–174.

Ly-Tio-Fane, M., 1976. Pierre Sonnerat (1748–1814). Port-Louis, the Author. vii–xv, 3–157.

Mamet, J. R. 1993. L'entomologie aux îles Mascareignes. L'époque pré-Linnéenne (1619–1771). *Proceedings of the Royal Society of Arts and Sciences of Mauritius*, **5**, 3: 97–132.

Marragon, P., 1795 (+ ca. 1803). Mémoire sur l'Isle de Rodrigue. Mauritius Archives, Ms TB 5/2, 16 p.

Martineau, A., 1920. Correspondance du Conseil supérieur de Pondichéry et de la Compagnie des Indes. Tome I. 1726–1730. Pondichéry, Société de l'Histoire de l'Inde Française. 1–431.

Martineau, A., ca.1920. Correspondance du Conseil supérieur de Pondichéry et de la Compagnie des Indes. Tome II. 1736–1738. Pondichéry, Société de l'Histoire de l'Inde Française – Paris, Éditions Leroux. 1–259.

Milne-Edwards, A., 1875. Nouveaux documents sur l'époque de la disparition de la faune ancienne de Rodrigue. Relation de Tafforet. *Annales des Sciences naturelles, Zoologie*, **6**, 2, 4: 1–20.

Moore, H. E. and L. J. Guého, 1984. Palmiers. Flore des Mascareignes, 189. Mauritius, Sugar Industry Research Instituite, Paris, ORSTOM and Kew (UK), Royal Botanic Gardens. 1–34.

North-Coombes, A., 1971. The Island of Rodrigues. Port-Louis, the Author, Mauritius Advertising Bureau. i–x, 1–337.

North-Coombes, A., 1979. The vindication of François Leguat. Port-Louis, Service Bureau. i–xxxviii, 1–254. [2nd edition in 1991].

North-Coombes, A., 1980. La découverte des Mascareignes par les Arabes et les Portugais. Rétrospective et mise au point. Port-Louis, Service Bureau. i–x, 1–175, 14 pl.

North-Coombes, A., 1986. Histoire des Tortues de terre de Rodrigues et le mouvement maritime de l'île de 1601 à 1808. Port-Louis, Service Bureau. i–viii, 1–75, 6 pl. [2nd edition in 1994].

North-Coombes, A., and M. Lagesse, 1990. Marragon, Philibert (c.1750-1826). *In*: Dictionnaire de biographie mauricienne, Port-Louis, S.H.I.M., n°**45**: 1390-1392.

Pinaud, P. F., 1990. Les receveurs généraux des finances. 1790-1865. Genève, Droz – Paris, Champion. i–iv, 1–260.

Pinault-Sørensen, M., 1989. La *Diderota amphicarpa* de Commerson. *Recherches sur Diderot et sur l'Encyclopédie*, **6**: 149–152.

Pingré, A. G., 1761. Voyage à Rodrigue. Ms n°1804, Bibliothèque Sainte-Geneviève, Paris. (Cf. Serviable and Alby, 1993; Hoarau et al., 2004).

Rösler, H., 1993. Description of a female *Phelsuma edwardnewtonii* Vinson and Vinson, 1969 (Sauria: Gekkonidae). *Dactylus*, **2** (2): 71–75.

Schoepff, J. D. 1792–1801a. Historia Testudinum iconibus illustrata. Erlangae, Johannis Jacobi Palm. i-xii, 1-136, pl. 1–31.

Schoepff, J. D. 1792–1801b. Naturgeschichte der Schildkröten mit Abbildungen erläutert. Erlangen, Johann Jakob Palm. (i–xii), 1–160, pl. 1–31.

Serviable, M. and J. Alby, (éds.), 1993. Abbé Alexandre-Gui Pingré. Courser Vénus. Voyage scientifique à l'Ile Rodrigue 1761. Fragments du Journal de Voyage de l'Abbé Pingré. Saint-Denis (La Réunion) et Stanley (Mauritius), Ars Terres Créoles – Éditions de l'océan Indien. 1–123.

Staub, F. 1993., Fauna of Mauritius and associated flora. Mauritius, the author [Précigraph limited]. 1–103, pl. [also in French: Faune de l'île Maurice et flore associée.]

Strahm, W., 1989. Plant Red Data Book for Rodrigues [IUCN]. Koenigstein, Koeltz scientific books. v–viii, 1–241.

Suckow, G. A. 1798. Anfangsgründe der theoretischen und angewandten Naturgeschichte der Thiere. Dritter Theil. Von den Amphibien. Leipzig, Weidmannischen Buchhandlung. 1–298.

Susane, L., 1876. Régiment Royal-Comtois. *In*: Histoire de l'Infanterie Française. Paris, Librairie militaire de J. Dumaine, tome **4**: 410–419.

Tafforet, J., 1726. Relation de l'Isle Rodrigue. Ms, Archives nationales, Paris, Fonds des Colonies, Correspondance de l'Île de France, C4, vol. 12, n° 48; ex Ministère de la Marine, n°29, 1. (cf. Milne Edwards, 1875; Dupon, 1974).

Vinson, J., 1965. Quelques remarques sur l'île Rodrigue et sur sa faune terrestre. *Proceedings of the Royal Society of Arts and Sciences of Mauritius*, **2**, 3: 263–277.

Vinson, J. and J.-M. Vinson, 1969. The saurian fauna of the Mascarene Islands. *Bulletin of the Mauritius Institute*, **6**, 4: 203–320.

APPENDIX – The name of Port Mathurin, and Julien Tafforet

A simple search on the Internet shows that frequently the origin of the name Port Mathurin, the only city of Rodrigues, is associated with the name of Mathurin Bréhinier, a shipwright who arrived on the island in early 1801, at Marragon's request. Let us remember that another Mathurin had previously distinguished himself in Rodrigues: Yves Mathurin Jullienne, who arrived in 1761, son-in-law of François Vincent Martenne de Puvigné, administrator of Rodrigues from 1751; Jullienne was himself administrator, approximately from 1763 to 1769 (North-Coombes 1971). Nevertheless, the name Mathurin in connection with Rodrigues appears even earlier, as a toponym: it is mentioned in the *Relation* and on the map of Rodrigues drawn ca. 1726, both attributed to Tafforet, under the respective forms of *ravinne à Maturin* and *ravinne à Mathurin* (e.g., Dupon 1969, 1972). This Mathurin ravine (gully) is clearly indicated to the East of the future Port Mathurin; it corresponds to the current rivière de l'Anse aux Anglais. The *r*[avine] *à Maturin* still appears on a map dated 1737, known as the Bibliothèque Sainte-Geneviève or Boulenger's map, from the name of the Captain of *La Ressource* (see Dupon 1969; Berthelot 2002), a map based on the earlier 1726 one.

The name disappears from subsequent maps and is no longer used in the texts, published and unpublished, relating to Rodrigues, until resurrected on a British Admiralty map dated 1810. This is the *Plan of Mathurin Bay*, drawn up by Lieutenant Grubb, of the Royal Navy (North-Coombes 1971: 247). Importantly, North-Coombes noticed that the outline of the coast on Grubb's map exactly matches that drawn in 1737; he adds that the name Mathurin is then that of the bay, not the port, because the village did not then exist. It is, therefore, almost certain that Grubb, copying the old chart, used one of the two names close to the bay (the other being the cove called 'enfoncement de François Legat – ou Le Gac') to identify the place. The transition from applying the name to the port then to the town was gradual, during the nineteenth century; even the Montagne Fanal, that dominates the surroundings, was at one time called Mont Mathurin (map of Belcourt, 1913, in Berthelot 2002: 222). Let us add that the name Mathurin was unusual in Bourbon, at least in 1710 when Desforges Boucher wrote his famous *Mémoire* (Barassin 1978). It is very likely, as North-Coombes (1971: 246) has already considered, that Mathurin Morlaix, on board *La Ressource* with Tafforet, was the source of the name of the present capital of Rodrigues.

The name of Julien Tafforet appears for the first time in a note from 1722, which indicates: "*In this condition the boat is rated 5795 livres, 13 sols, 6 deniers. Julien Tafforet, designated as its pilot, receives 25 livres* [pounds] *a month's wages*" (Lougnon 1932). Julien Tafforet, a native of Bourbon[1], was a member of an expedition organized in 1725 by the *Conseil de Bourbon* to take possession of Rodrigues. The reasons for, modalities, and the unexpected progress of the operation have been detailed by Albert Lougnon (1956: 295–326); see also Dupon (1969: 59–63) for the official orders and instructions. Among the instructions, "*formal recommendation was made to load at Rodrigue four hundred tortoises, and fruits of latan palms to serve them food, being strictly forbidden to leave even one on Mauritius*." The possession was planned to be followed by a permanent occupation, but volunteers were lacking: the future settlers were therefore 'chosen' by the authorities, and among them was Mathurin Morlaix; being one of the few named he must have had a certain reputation – good or bad[2]. The little group boarded the corvette *La Ressource*, Captain Boulenger, assistant Tafforet (appointed by Antoine Desforges Boucher). The cable of the corvette anchored off Rodrigues broke and Boulenger was forced by contrary winds to return directly to Mascarin (Bourbon), reached 52 days after his departure. Boulenger possibly missed the best anchorage and, unable to get back to the future Mathurin Bay, anchored farther west. Tafforet and four companions, landed on the island by a rowing boat, were abandoned: they remained on Rodrigues from October 1725 to June 1726. It is not known if Mathurin Morlaix was among them, but Tafforet had plenty of time to explore the island, prepare the account and the map mentioned above, where the name Mathurin appears. Tafforet clearly knew the plants of Bourbon very well, as he named many plants found in Rodrigues using Bourbon names. The five sailors were rescued and taken back to Bourbon, by the self-same *La Ressource* on her last trip: "*It is on her return from Madagascar via Rodrigue where she removed Tafforet and his companions, that* La Ressource *ended her career. She was decommissioned in St. Paul on 27 July 1726, the bow and stern being completely rotten*" (Lougnon 1956: 326, note 51).

Tafforet was later instructed in 1731 to collect on Rodrigues "*as many tortoises as they can to populate the islets adjacent to our island* [Isle de France] *to ensure victuals for the Company's ships*…", although it didn't actually happen (Cheke and Hume 2008: 205; 317, note 275; 353, note 15). The unfortunate Julien Tafforet possibly died in the beginning of 1732 in a shipwreck, although the details about this fate are

scarce and somewhat contradictory. Lougnon (1933: 21), in his work on the correspondance between the *Conseil supérieur de Bourbon* and the *Compagnie des Indes*, relates this information: "(*At the Isle Bourbon, on 15 December 1732*) *The brigantine* Le Dauphin*, commanded by Mr Taforet* [sic]*, harbour-lieutenant at the Isle of France, set sail on 29 December* [1731] *to return to the Isle de France to pass the bad-weather season there, via Rodrigues Island to take tortoises, following the orders* [of the members] *of the Provincial Council. Since that time we had no news from this brigantine which has probably perished; however we experienced a cyclone only on 15 February,* [leaving] *more than enough time to get to its destination. Mr du Bocage, intending to go to the Isles of Martin Vas*[3]*, had asked to embark on it, and he was due to command it after its arrival at the Isle de France*." However, this report is not consistent with other data subsequently provided by Lougnon (1958: 8, 18, 108–109, 123–124, 140–141). According to archived records, *Le Dauphin*, loading 50 tons, belonged to the [Company's] Pondicherry fleet. Purchased in India, she was used initially to supply the Mascarenes, then, leaving Pondicherry in February 1731, used for local traffic between the islands (Martineau 1920: 100; Lougnon 1958: 18). On 29 December 1731 occurred her "*departure from Bourbon to reach the Isle de France with a cargo of wooden boards, via Rodrigues where she was to load tortoises. Thwarted by* [unfavourable] *winds, she sailed to Pondicherry*" (Lougnon 1958: 109).

Complicating this survey a little more, it appears that there were at the same time at least two ships with the name *Le Dauphin*, one of 50 tons, the other one of 500 tons, both regularly sailing in the same areas. Both are mentioned by Lougnon (1958) and Martineau (1920; ca. 1920). The former author clearly distinguishes each one, but they are either well identified as vaisseau and bot or brigantine, respectively, by the latter, or mixed; sometimes the cargo can help to identify each boat. The bot – brigantin *Le Dauphin* is first mentionned by Martineau (1920) as coasting between the establishments of Pondicherry, Chandernagor, Madras, Surat, Mahé, Yanaon, Masulipatnam, in 1728–1729, before her sojourn in the Mascarenes. She was finally sold at auction in 1736 or 1737 (Martineau ca. 1920: 229). Later mentions clearly refer to the larger boat only. However in May 1740 a 50-ton ship called *Le Dauphin* made a stopover at Rodrigues (North-Coombes 1986: 51), but 50 tons could be a mistake for 500 tons. If this ship, or *Le Dauphin* previously sold in India, is the Tafforet's vessel, it cannot have been shipwrecked in 1732. Nonetheless after 1732 Tafforet disappears from Mascarene history, and is remembered only for his *Relation* and map.

NOTES

1 According to North-Coombes (1971: 37), but the name Tafforet is not included on the lists of the early settlers of the island. We looked in vain for his memory in several archives of civil status, including in département of Charente-Maritime where the surname is not rare. Clearly he or his parents were not there when Boucher wrote his *Mémoire*, but could have arrived soon after? He may have been quite young in 1725.

2 "*According to the statement of nominees for Rodrigue, among the settlers there were: Roburent and his wife, Le Blanc, Sergeant Dubois, a corporal and eight soldiers, Pierre Boucher, Mathurin Morlaix, Alexis Lauret, his wife and their three children, their four black men and five women, three black men and two women belonging to the commander of the island, five workers: blacksmith, tailor, baker, mason, shoemaker, Pierre Caron, his wife and their two children, Pierre Fontaine, his wife and son*. Archives of La Réunion. C 2, f. 175" (Bousquet, 2011: 77, note 43).

3 The Martin Vas (Martim Vaz) islands, distantly off Brazil, were on the regular route of ships linking Europe with the Mascarenes, between Gorée (West Africa) and the Cape of Good Hope.

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Herpetofaunal Contributions of Johann Büttikofer and Harry Johnston in Liberia

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The late 1800s and early 1900s were periods of extensive European colonial exploration, expansion, rivalry, and colonization throughout the world, but particularly on the continent of Africa. European powers, especially Britain, Germany, Portugal, Belgium, and France, vied for control of African natural resources to fuel their empires while at the same time denying these resources to rival nations (Oliver, 1957). Africa was largely an unknown continent to Europeans even at this late date, as explorers, missionaries and adventurers pushed inland from the coasts and large rivers to ascertain the value of the interior regions to colonization and empire. While much of the interest stemmed from strategic economic or military concerns, early explorers also described the fauna, flora, and peoples of the region in numerous books that piqued public interest. While many diplomats and politicians viewed Africa from an exploitative viewpoint, naturalists were intrigued by the great biodiversity of the continent. The rush for empire thus provided an opportunity for biologists to gain entry into lands previously inaccessible as local people came under the control of colonial administrations.

The Republic of Liberia, containing a total land area of 96,258 km^2, was founded by freed African slaves repatriated from the United States beginning in 1820; it became a republic in 1847 (Johnston, 1906; Cassell, 1970). The government was in theory modeled on the U.S. Constitution, but in reality governance extended little beyond the capital city of Monrovia. The rest of the country was populated by loosely confederated indigenous peoples that paid little or no allegiance to the government, and indeed resented the intrusion of American freed slaves into their territory. The country consists of mangrove forests along the coastline, a considerable amount of broadleaf evergreen Upper Guinean Region rain forest, a mixed broadleaf-evergreen forest, agricultural scrub land, and a small inland grassland tableland (Robertson, 2001). The climate is humid, with a rainy season that lasts from May to October. Liberia has always been relatively poor, relying largely on agriculture and trade with European nations. Having basically been ignored by the United States, Europeans were extending their influence in Liberia and throughout West Africa by the mid to late 1800s, with agents in particular seeking to gain control of the rubber trade (Johnston, 1906; Cassell, 1970). This was especially true with regard to Britain's interest, which also involved keeping the French from expanding their colonial holdings.

It was during this time that two remarkable men, Johann Büttikofer and Sir Harry Johnston, came to Liberia and recorded some of the first in-situ observations of that country's fauna, flora, and peoples. One was a Swiss naturalist employed by a Dutch museum, the other a British Foreign Service officer with a keen interest in nature and local people. The first was supported by a museum director intensely interested in collecting specimens for science, the other by his government in a non-biological capacity. Both traveled widely under difficult conditions and recorded their observations in books on Liberia that were devoted to wide-ranging topics; both books had chapters on amphibians and reptiles that have often been overlooked. In the following accounts, I briefly outline background information on these men, their explorations, and their findings with regard to herpetology.

FIGURE 1. Johnann Büttikofer (seated). Photo courtesy of Ans Molenkamp, Rijksmuseum van Natuurlijke Historie.

JOHANN BÜTTIKOFER

Johann Büttikofer (9 August 1850–24 June 1927; Figure 1) was born in Ranflüh, Emmenthal, Switzerland into a family of teachers who instilled in their children a love of nature. Indeed, Johann Büttikofer began his professional career as a schoolteacher. In 1876, however, he moved to Bern, Switzerland, to take a position as a preparator at the Natural History Museum. In 1878, he joined the staff of the Rijksmuseum van Natuurlijke Historie in Leiden, The Netherlands, where he served as amanuensis (senior technician) from 1878–mid 1884 and later as curator (July 1884–1897) with a primary interest in birds. He received an honorary doctorate in 1895 from the University of Bern (note Fransen et al., 1997, incorrectly gave the date as 1897; see Dop and Robinson, 2013). From then until his retirement in 1924, he served as the Director of the Zoological Garden in Rotterdam, a move that was prompted by the refusal of the Leiden museum to increase Büttikofer's salary (Holthuis, 1995). He died in Bern in 1927. Gijzen (1938), Holthuis (1995), Fransen et al. (1997), and Dop and Robinson (2013) provide additional details on his life and career.

The following information is derived largely from Dop and Robinson's (2013) annotated account of *Reisebilder aus Liberia*. Büttikofer made two extensive expeditions to Liberia, the first from November 1879 to the spring of 1882 with Carolus Franciscus Sala, who subsequently sickened and died in Liberia in 1881. The first expedition was entirely funded by Hermann Schlegel, Director of the Rijksmuseum, from personal funds acquired via his second marriage. Although Büttikofer also returned sick and exhausted from his first expedition, he set out on the second expedition that extended from November 1886 to May 1887 with F.X. Stampfli, a hunter and zoological collector whom Büttikofer had trained. Stampfli had previously been sent to Liberia from May 1884 until early 1886 by Büttikofer, but he too returned in poor health. Büttikofer and his assistants traveled widely in Liberia, collecting crustaceans, birds, and mammals in addition to amphibians and reptiles. The expenses from these later expeditions were offset by the sale of the collections to the Rijksmuseum and others, including personal collections. Büttikofer never returned to Liberia, although he trained a Liberian collector, Archey Demery, to carry on his work; Demery unfortunately died in Liberia in 1891 shortly after returning from Leiden. The Republic of Liberia later awarded Büttikofer the "Order of African Redemption" in recognition of his contributions to understanding the natural history of the country. The lizards *Sphenomorphus buettikoferi* and *Ophisaurus buettikoferi*, both from Borneo, were named in his honor.

A compilation of Büttikofer's first Liberian expedition was published in 1883. This monograph contained only a short section on amphibians and reptiles (pp. 31–33), but it did include a map of Büttikofer and Sala's travels in Liberia. A narrative of observations and of scientific results later was updated and expanded in Büttikofer's two-volume book, "Reisebilder aus Liberia" (1890; annotated English edition by Dop and Robinson, 2013), although much of Büttikofer's collection was described by other taxonomic specialists. This book included a section on amphibians and reptiles (Volume 2, pp. 435–447) listing 7 turtles, 2

crocodilians, 6 lizards, 11 snakes, 3 frogs, and a caecilian within the Liberian fauna (Table 1). Several of these species were well known (3 sea turtles, the crocodilians, Nile monitor, African python, several venomous snakes) and it is not surprising that Büttikofer's narrative focuses on these species. It seems clear, however, that most of his observations were based on direct contact with these species, as well as from information gleaned from local peoples. In volume 1 (pp. 122–124), for example, an encounter with *Python sebae* resulted in the quick demise of the snake by natives who considered it a delicacy. No new species were described, and most of his species are easily placed into modern nomenclature, although a few are now known to comprise multiple phenotypically similar taxa (e.g., *Naja, Philothamnus*). The book contains black and white illustrations of *Dermochelys coriacea* and the heads of *Crocodylus niloticus* (now *C. suchus*; Hekkala et al., 2011)*, C.* (*=Mecistops) cataphractus* and *Osteolaemus tetraspis*, in lateral view, and a color lithograph of *Bitis rhinoceros*. None of the illustrations are of exceptional quality.

Büttikofer collected numerous herpetological specimens and placed them in the Rijksmuseum, although some appear not to have been catalogued until much later (Gijzen, 1938). Unfortunately, the Rijksmuseum collection is not completely digitized making an easily accessible summary of the Liberian collection impossible at present (Esther Dondorp, personal communication). Included in the partially digitized list, however, are specimens of *Dermochelys coriacea*, *Eretmochelys imbricata, Pelusios castaneus, P. cupulatta, Kinixys erosa, Trionyx triunguis, Mecistops cataphractus, Osteolaemus tetraspis, Varanus niloticus, Bitis gabonica* and *Calabaria reinhardtii* (RMNH 4820 catalogued under the genus *Charina* as per Kluge, 1993) (Table 1). Several species catalogued as part of the Büttikofer collection in the Rijksmuseum, but not mentioned in the 1890 text, include *Lepidochelys olivacea, Aubria subsigillata, Phrynobatrachus alleni* and *P. ogoensis*. It is possible that Büttikofer confused the skull of *Lepidochelys* with *Chelonia mydas* and that he considered *Aubria subsigillata* under the name *Rana occipitalis*, but why *Phrynobatrachus alleni* was not included is unknown. Indeed, the 20 specimens of *P. alleni* collected by Büttikofer and Sala form the paratype series (RMNH 6594) of this species (Parker, 1936; Miracle et al., 2007). *Phrynobatrachus ogoensis*, a West African species unknown from Liberia, was likely misidentified. Other taxa collected by Büttikofer, but not mentioned in his books, are deposited in the Rijksmuseum collection (e.g., *Amietophrynus regularis* and *Silurana* (formerly *Xenopus) tropicalis*; see Parker, 1936).

Büttikofer traveled throughout Liberia (Dop and Robinson, 2013), and some of his specimens have general collecting localities associated with them, including Robertsport (a coastal city near the border with Sierra Leone), Cape Grand Mount (the peninsula on which Robertsport is situated), Buluma (near Fishermans Lake), Fishermans Lake (a tidal lagoon now known as Lake Piso east of Robertsport), Hilltown (Hill Town), Soforeh Place, Soforé (place am St. Paul), and Schiffelinsville. Soforeh Place and Soforé (place am St. Paul) are likely the same location along the St. Paul River, and apparently this location was in proximity to Hill Town and Schiffelinsville. As such, specimens are associated with only two general areas, the coastal region around Robertsport and an inland agricultural area along the St. Paul's River.

SIR HARRY JOHNSTON

Sir Harry Johnston (12 June 1858–31 July 1927; Figure 2) was a prolific writer and explorer, and a very important figure in Britain's colonial expansion in Africa during the end of the 19th and beginning of the 20th centuries. He was born to a well-to-do family in London and attended King's College, London (degree not completed), followed by four years of studying painting at the Royal Academy. Even at an early age, Johnston showed interest in draw-

FIGURE 2. Harry Johnston, frontispiece to his autobiography, 1923. Photo taken in 1922.

ing and painting birds, fostered by his teacher's, mother's and grandmother's interest in natural history. He frequented the Zoological Gardens in London, as well as the British Museum (Natural History), and he independently studied zoology at Regent's Park and anatomy at the museum of the Royal College of Surgeons. He also took trips abroad, visiting Majorca, Spain and France, where he studied art and perfected his artistic skills.

It was during this early period in his life that he made his first visit to Africa, spending 8 months in 1879 exploring North Africa, including the interior regions of Tunisia. He published well-illustrated articles on art and architectural subjects while there, receiving the Order of Nizam from the Bey of Tunis in recognition of his contributions. He later traveled to southern Angola in 1882, eventually meeting with the famed explorer Sir Henry Stanley and traveling to the upper reaches of the Congo River; as such, he was one of the first Europeans to see this area. In 1884, he was sponsored by the Royal Geographical Society to explore the regions around Mt. Kilimanjaro, during which time he negotiated treaties with local chieftains. After he formally entered the Foreign Office in 1885, he was posted to Cameroon and the Niger River (1886, as Vice Consul, later Consul), Mozambique (1889, as Consul), Nyasaland (=Malawi) (1891, as British Commissioner for South Central Africa), Tunisia (1897, as Consul General), and Uganda (1899, as Special Commissioner) (Oliver, 1957). Johnston was instrumental throughout this period in negotiating numerous treaties expanding British dominion, totaling more than 400,000 square miles over much of central and east Africa. For his diplomatic service, Johnston was awarded the Knight Commander of the Order of Bath. Details of Johnston's African travels, postings, and accomplishments in the diplomatic corps are in Oliver (1957).

Travels throughout Africa took a serious toll on Johnston's health; he was often afflicted by tropical fevers. He retired from the consular service in 1902 and settled down in West Sussex, England, running unsuccessfully for a seat in Parliament in 1903 and 1906. He became a prolific writer, producing 5 novels, an autobiography (Johnston, 1923), and travel accounts of his many explorations and travels through Africa (e.g., *The Uganda Protectorate*, 1902). Cassada (1977a) included 621 entries in a summary of his writings, but notes that the list is probably incomplete. In these writings, Johnston is said to have "opened new vistas in zoology, botany, tropical medicine, and related areas." For example, he was the first European to discover and illustrate the okapi (named for him, *Okapia johnstoni*) and the five-horned (now Rothschild's) giraffe (*Giraffa camelopardalis rothschildi*), and he wrote the book *British Mammals* (1903). Like Büttikofer but more extensively, Johnston also recorded the dress, social customs, lifestyle, languages (resulting in his book *Comparative Study of the Bantu and semi-Bantu Languages*, 1919–1922), and beliefs of local people, an interaction that resulted in an appreciation of Africans not often held by colonial administrators. He attempted to protect Africans from European land confiscation, but he sometimes invested too much authority in the chiefs and minor landowners by providing exclusive rights to lands traditionally held in common endowment; such

land allocation often led to later disputes. Johnston's interest in peoples of Africa and African descent extended to visits to the United States in 1908 at the invitation of President Theodore Roosevelt, and subsequently to Haiti, Cuba, the West Indies, Central America and Brazil. These visits resulted in his book *The Negro in the New World* (1910) that Weaver (1937) termed "a document of great penetration and admirable humanitarian intelligence." Among other distinctions, Johnston was awarded the gold medal of the Royal Geographical Society (1904) and an honorary Doctor of Science from Cambridge University (1902). The African lizards *Latastia johnstonii* and *Triceros johnstoni* were named in his honor. He died near Worksop in 1927, having suffered a serious stroke in 1925. In addition to his autobiography, extensive information on Johnston's career and life is included in Weaver (1937), Oliver (1957) and Cassada (1977b), and in his letters compiled by his brother, Alex (Johnston, 1929).

Johnston's foremost contribution to herpetology was in his chapter in the 1906 book *Liberia* (Johnston, 1906). This book was issued in two volumes; amphibians and reptiles were covered in volume 2 (pp. 807–833). This chapter includes an appendix summarizing the collections of Büttikofer, F.J. Whicker (an employee of the Liberian Rubber Company), Johnston, and "others." This list includes 7 turtles, 3 crocodiles, 13 lizards, 26 snakes, 5 frogs and a caecilian. Some of the species mentioned by Johnston in his appendix (*Hemidactylus mabouia, Atractaspis corpulenta, Tropidonotus ferox* [=*Hypsyrhynchus ferox*]*, Rappia vittigera*) cannot be identified with certainty without examining specimens, but no museum numbers are provided and it is unclear whether specimens exist. *Atractaspis corpulenta* is currently unlisted from Liberia (The Reptile Database, http://reptile-database.reptarium.cz/, accessed 25 April 2013). The area defined as Liberia in the late 1800s included a larger area than the present-day nation, but nevertheless, *A. c. leucura* likey occurs within the country (M.-O. Roedel, personal communication). It is possible that Johnston observed this species at nearby locations in West Africa. The Reptile Database also does not list *H. mabouia* as occurring in Liberia, although there is a specimen from Monrovia deposited in the Museum of Comparative Zoology (Barbour and Loveridge, 1930); in any case, the presence of this species in Liberia would represent an accidental introduction. It is also possible Johnston was referring to *H. angulatus, H. ansorgii or H. muriceus* (A. Bauer, personal communication), but without specimens it is impossible to verify the identity of this report. *Tropidonotus ferox* is a snake endemic to Hispaniola in the West Indies. *Rappia vittigera* likely refers to *Hyperolius nitidulus* if specimens were collected outside of closed rainforest habitats (M.-O. Roedel, personal communication).

Johnston's information on the herpetofauna of Liberia was based on two sources, direct observation and field notes and consultation with George A. Boulenger of the British Museum (Natural History). Johnston journeyed to Liberia first in 1882 while traveling along the West African coast, although he did not recall landing there (Johnston, 1923); he did land at Basá and perhaps at Cape Palmas as he returned to England in 1888. More extensive expeditions occurred from 1904–1906, during which time Johnston visited most portions of the country. He traveled during the dry season, and noted that "my journeys through the forests of the interior, though very slow, were excessively fatiguing, because one had practically to walk the whole way in tropical hot weather, and often following nothing but elephant paths." Nevertheless, he explored the entire coastline and all interior districts. He also spent much time in Monrovia gauging Liberian politics, especially as it related to British, French, German and American interests (Oliver, 1957). Johnston collected specimens of many taxa for the British Museum (Natural History), but only *A. agama* (BMNH 1905.10.11.50 52) is catalogued from Liberia (P. Campbell, personal communication).

Upon his retirement, Johnston began work on his book *Liberia*, based on his voluminous

TABLE 1. Liberian herpetofauna recorded by Johann Büttikofer (1890) and Harry Johnston (1906) in relation to current taxonomy.

BÜTTIKOFER	JOHNSTON	CURRENT
Turtles		
Cinixys erosa	*Cinixys sp.*	*Kinixys erosa*
Sternothaerus adansonii	*Sternotherus niger*	*Pelusios cupulatta* or *Pelusios niger*
Sternothaerus derbianus	*Sternothaerus derbianus*	*Pelusios castaneus*
Trionyx triunguis	*Trionyx triunguis*	*Trionyx triunguis*
Chelone mydas	*Chelone mydas*	*Chelonia mydas*
Chelonia imbricata	*Chelone imbricata*	*Eretmochelys imbricata*
Dermochelys coriacea	*Dermochelys coriacea*	*Dermochelys coriacea*
Crocodiles		
Crocodilus cataphractus	*Crocodilus cataphractus*	*Mecistops cataphractus*
Crocodilus niloticus	*Crocodilus niloticus*	*Crocodylus suchus*
Osteolaemus tetraspis	*Osteolaemus tetraspis*	*Osteolaemus cf. tetraspis*
Lizards		
Agama colonorum	*Agama colonorum*	*Agama agama* complex
Amphisbaenia liberiensis	*Amphisbaenia iberiensis**	*Cynisca liberiensis*
	Chamaeleo gracilis	*Chamaeleo gracilis*
Chamaeleo senegalensis	*Chamaeleo senegalensis*	*Chamaeleo senegalensis*
	Hemidactylus mabouia	*Hemidactylus mabouia(?)*
	Hemidactylus fasciatus	*Hemidactylus fasciatus* complex
	Lacerta echinata	*Gastropholis echinata*
Lygodactylus sp.	*Lygodactylus gutturalis*	*Lygodactylus gutturalis*
Lygosoma fernandi	*Lygosoma fernandi*	*Lepidothyris fernandi*
	Mabuia bensoni	*Trachylepis bensonii*
	Mabuia maculilabris	*Trachylepis maculilabris*
	Mabuia raddoni	*Trachylepis affinis*
Varanus niloticus	*Varanus niloticus*	*Varanus niloticus; Varanus ornatus*
Snakes		
Atheris chloroëchis	*Atheris chlorechis*	*Atheris chlorechis*
	Atractaspis corpulenta	*Atractaspis corpulenta (?)*
	Bitis gabonica	*Bitis rhinoceros*
Bitis nasicornis	*Bitis nasicornis*	*Bitis nasicornis*
	Boodon niger	*Boaedon virgatus*
	Bothrophthalmus lineatus	*Bothrophthalmus lineatus*
Causus rhombeatus	*Causus rhombeatus*	*Causus maculates*
	Dasypeltis scabra	*Dasypeltis fasciatus*
Dendroaspis jamesoni	*Dendraspis jamesonii (?)*	*Dendraspis viridis*
	Dendraspis viridis	*Dendraspis viridis*

TABLE 1. – *continued*...

BÜTTIKOFER	JOHNSTON	CURRENT
	Dipsadomorphus blandingii	*Toxicodryas blandingii***
	Dipsas pulverulenta	*Toxicodryas pulverulenta*
Eryx reinhardtii	*Calabaria reinhardtii*	*Calabaria reinhardtii*
	Grayia smythii	*Grayia smithii*
	Hapsidophrys lineata	*Hapsidophrys lineatus*
Hapsidophrys smaragdina	*Gastropyxis smaragdina*	*Hapsidophrys smaragdina*
Naja melanoleuca	*Naja melanoleuca*	*Naja melanoleuca*
Naja nigricollis	*Naja nigricollis*	*Naja nigricollis; Naja katiensis*
Philothamnus irregularis		*Philothamnus irregularis; Philothamnus semivariegatus*
	Psammophis sibilans	*Psammophis sibilans*
Python sebae	*Python sebae*	*Python sebae*
	Rhamnophis aethiops	*Rhamnophis aethiopissa*
	Thelotornis kirtlandii	*Thelotornis kirtlandii*
	Thrasops flavigularis	*Thrasops flavigularis*
Typhlops sp.	*Typhlops liberiensis*	*Afrotyphlops liberiensis*
	Typhlops punctatus	*Afrotyphlops punctatus*
	Tropidonotus ferox	***
Vipera chloroëchis		*Atheris chlorechis*
Frogs		
Bufo regularis	*Bufo regularis*	*Amietophrynus regularis* or *Amietophrynus maculatus*
Rana occipitalis	*Rana occipitalis*	*Hoplobatrachus occipitalis*
	Rappia fuscigula	*Hyperolius fuscigula*
	Rappia vittigera	*Hyperolius nitidulus(?)*
Xenopus calcaratus	*Xenopus calcaratus*	*Silurana tropicalis*
Caecilians		
Uraeotyphlus africanus	*Uraeotyphlus seraphini**	*Geotrypetes seraphini*
	Geotrypetes petersii (?)*	*Geotrypetes seraphini*

* these are direct text references to Büttikofer by Johnston as to occurrence.
** some authors use the genus *Boiga* for this species.
*** identity unknown. *Tropidonotus ferox* (=*Hypsirhynchus ferox*) is a snake known only from Hispaniola.

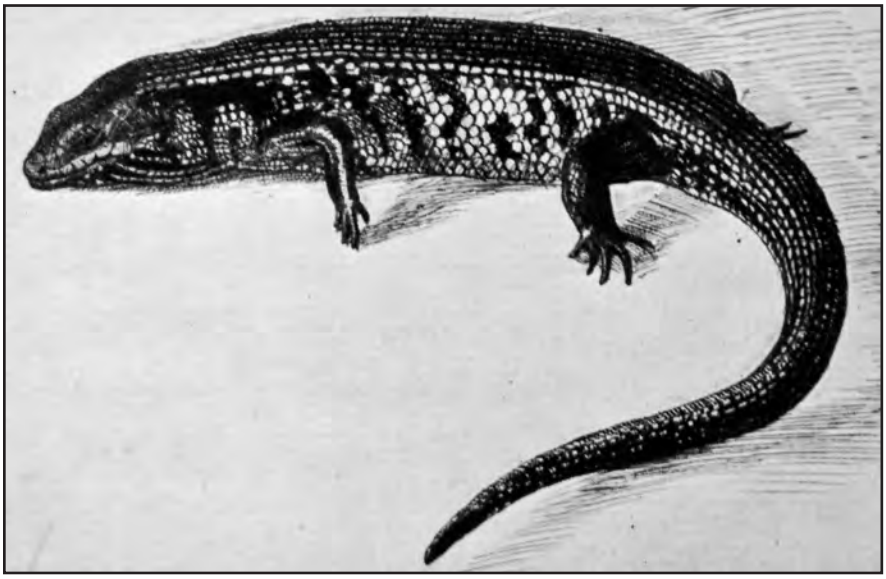

FIGURE 3. *Lygosoma* (= *Lepidothyris*) *fernandi.* Johnston's illustration from *Liberia* (1906).

notes and sketches. He provided information on amphibians and reptiles based on personal experience and reference to Büttikofer, and he noted native beliefs and observations regarding their natural history. Johnston's books are well-illustrated, containing paintings and black and white drawings of considerable skill, no doubt perfected during his early artistic studies. The chapter on amphibians and reptiles in *Liberia* includes black and white drawings of *Lygosoma* (= *Lepidothyris*) *fernandi* (Figure 3)*, Crocodylus niloticus* (= *C. suchus*)*, Osteolaemus tetraspis,* and *Chelonia mydas*. There is a full color illustration of *Agama colonorum* (=*A. agama*) drawn by Johnston (cover image), and a plate depicting the heads of seven species of venomous Liberian snakes (Figure 4). The plate is of particular interest in that it was executed by James Green (1859–1936) of the British Museum (Natural History). Green is well known for his meticulous natural history illustrations, including many herpetological subjects in G.A. Boulenger's *Catalogue of Snakes of the British Museum*[Natural History], J. Anderson's *Zoology of Egypt*, and A. Günther's *Biologia Centrali-Americana* (Nissen, 1978). Curiously, Green's plate in *Liberia* is not mentioned by Nissen (1969), although explicitly credited by Johnston. A photograph of Green, incorrectly identified as John Green, is in Leviton and Aldridge (1984).

As more and more biologists explored West Africa, many additional specimens of amphibians and reptiles found their way to international museums, resulting in many papers with descriptions of new species or summaries of regional faunas. Many authors do not cite the books of Büttikofer or Johnston (e.g., Loveridge, 1938, 1941; Briscoe, 1949; Johnsen, 1963; Villiers, 1963; Chippaux, 2006; Trapé et al., 2012), but it is clear that others were familiar with their observations. For example, Schmidt (1919, 1923), Noble (1924), Loveridge (1947), and Loveridge and Williams (1957) referenced both books, incorporating information from them in species accounts; the first three of these references, however, did not include a separate bibliography. Barbour and Loveridge (1930) included Johnston, but not Büttikofer, in a general bibliography of Liberian herpetofauna, but did not cite his book in the text. Taylor and Weyer (1958) and Kofron (1992) referenced Büttikofer, and Leeson (1950) noted that Johnston recorded 26 snakes in Liberia, all of which were found in the Gold Coast (=Ghana). Others have noted specimens

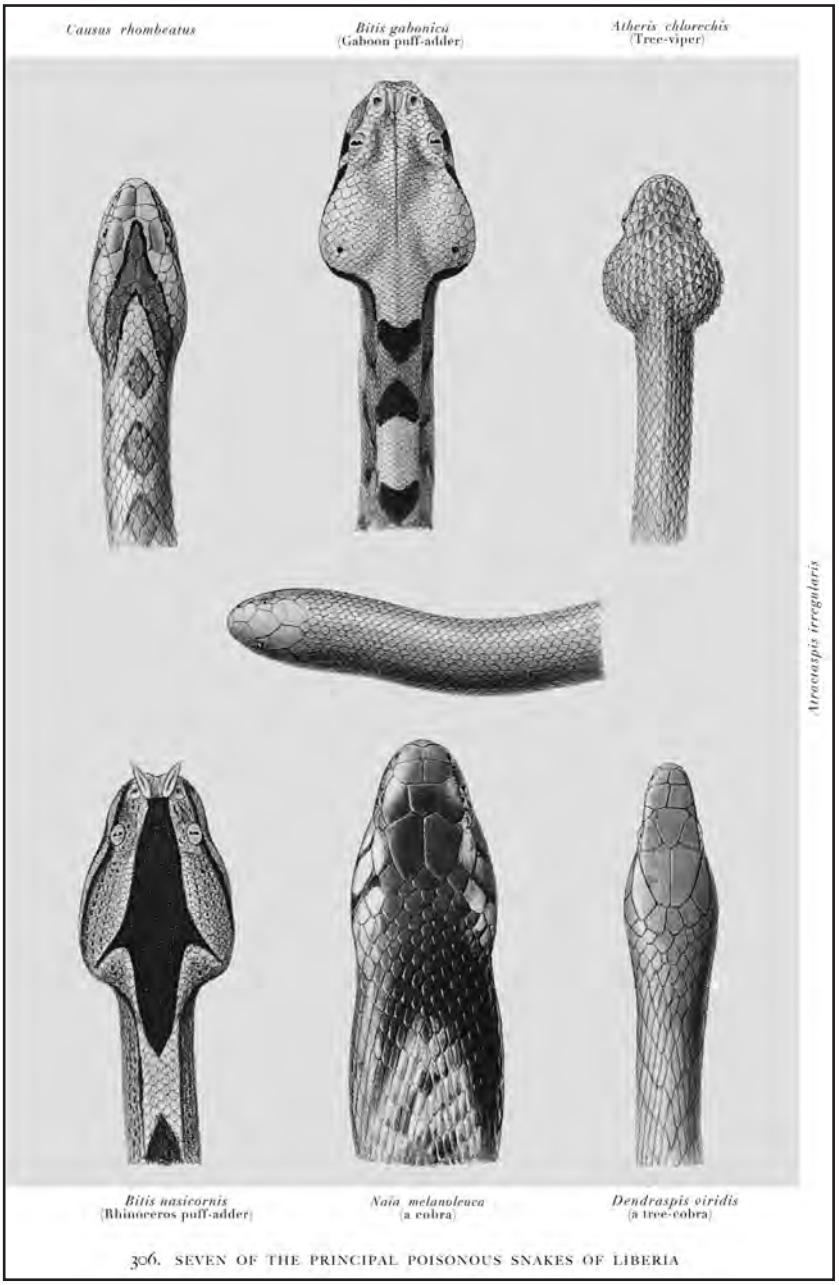

FIGURE 4. Seven venomous snakes of Liberia.Illustration by James Green in Johnston's (1906) *Liberia*.

in the Rijksmuseum deposited by Büttikofer, but without referencing his publications (e.g., Parker, 1936).

Today, the works of Johann Büttikofer and Sir Harry Johnston are not well known to herpetologists. Reading their book titles does not suggest that either contained information beyond an account of Liberia's location as a largely unknown outpost on the West African coast. Neither author published their results in a scientific journal, no new species were de-

scribed, and specific localities and specimens were not referenced. Although Büttikofer deposited many specimens that others examined, Johnston did not. The availability of these books likely was limited only to researchers with access to major libraries, and the publication of Büttikofer's (1883) book in Dutch undoubtedly limited its accessibility to a wide audience. Both men suffered great hardships while exploring and documenting the natural history of Liberia under difficult logistic conditions. They contributed significantly to a baseline understanding of Liberia's herpetofauna because their explorations resulted in the first check-lists and first-hand accounts of the amphibians and reptiles of this region. As such, they should be remembered for their pioneering efforts at bringing an awareness of West African biodiversity to the museum-bound scientists of the era.

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REFERENCES

Barbour, T. and Loveridge, A. 1930. Reptiles and amphibians from Liberia. Pp. 769–786 *In:* R. P. Strong (ed.), The African Republic of Liberia and the Belgian Congo: Based on the Observations Made and Material Collected during the Harvard African Expedition, 1926–1927, Volume 2. Contributions from the Department of Tropical Medicine and the Institute for Tropical Biology and Medicine N˚5.

Briscoe, M.S. 1949. Notes on snakes collected in Liberia. Copeia 1949:16–18.

Büttikofer, J. 1883. Mededeelingen over Liberia. Resultaten van eene Onderzoekingsreis, door J. Büttikofer en C.F. Sala in de jaren 1879–1882. C.L. Brinkman, Amsterdam. 147 pp., 1 map.

Büttikofer, J. 1890. Reisebilder aus Liberia. Resultate geographischer, naturwisseenschaftlicher und ethnographischer Untersuchungen während der Jahre 1879–1882 und 1886–1887. 2 volumes. E.J. Brill, Leiden. [Volume 2, 510 pp.]

Cassada, J. A. 1977a. Sir Harry Hamilton Johnston. A bio-bibliographical study. Communications from the Basel Africa Bibliography, N˚18:1–120.

Cassada, J. A. 1977b. Sir Harry H. Johnston as a geographer. The Geographical Journal 143(3):393– 406.

Cassell, C.A. 1970. Liberia: The History of the First African Republic. Fountainhead Publishers Inc., New York. 457 pp.

Chippaux, J.-P. 2006. Les serpents d'Afrique occidentale et centrale. Edition revue et augmentée. IRD Editions, Collection Faune et Flore tropicales N˚35, Paris. 311 pp.

Dop, H., and Robinson, P. 2013. Travel Sketches from Liberia: Johnann Büttikofer's 19th Century Rainforest Explorations in West Africa. Koninjilke Brill NV, Leiden. 866 pp. , 1 map.

Fransen, C.H.J.M., Holthuis, L.B., and Adema, J.P.H.M. 1997. Type-catalogue of the Decapod Crustacea in the collections of the Nationaal Natuurhistorisch Museum, with appendices of pre-1900 collectors and material. Zoologische verhandelingen Leiden N˚311: i–xvi + 1–344.

Gijzen, A. 1938. 's Rijks Museum van Natuurlijke Historie, 1820–1915. W.L. & J. Brusse's Uitgeversmaatschappij [doctoral thesis Rijksuniversiteit Leiden], Rotterdam. xiii + 335 pp.

Hekkala, E., Shirley, M.H., Amato, G., Austin, J.D., Charter, S., Thorbjarnarson, J., Vliet, K.A., Houck, M. L., Desalle, R., and Blum, M.J. 2011. An ancient icon reveals new mysteries: mummy DNA resurrects a cryptic species within the Nile crocodile. Molecular Ecology 20:4199–4215.

Holthuis, L.B. 1995. Rijksmuseum van Natuurlijke Historie 1820–1958. 171 pp. [http://www.repository.naturalis.nl/document/98177].

Johnsen, P. 1963. Notes on African snakes, mainly from Northern Rhodesia and Liberia. Videnskabelige Meddeleser fra den Natur historiske forening i Kjobenhavn 124:115–130.

Johnston, A. 1929. The Life and Letters of Sir Harry Johnston. Jonathan Cape and Harrison Smith, New York. 350 pp.

Johnston, H. 1906. Liberia. 2 volumes. Dodd, Mead & Company, New York. [Volume 2, pp. 521–1183].

Johnston, H. 1923. The Story of My Life. Bobbs-Merrill Company, Indianapolis, Indiana. 504 pp.

Kluge, A. G. 1993. *Aspidites* and the phylogeny of pythonine snakes. Records of the Australian Museum (Supplement) 19:1–77.

Kofron, C. P. 1992. Status and habitats of the three African crocodiles in Liberia. Biological Conservation 8:265–273.

Leeson, F. 1950. Identification of Snakes of the Gold Coast. Crown Agents for the Colonies, London. 142 pp.

Leviton, A. E., and Aldrich, M.L. 1984. John Anderson (1833–1900): A zoologist in the Victorian period. Pp. v–xiv *In:* Herpetology of Arabia by John Anderson [1896]. Facsimile Reprints in Herpetology, Society for the Study of Amphibians and Reptiles, Athens, Ohio.

Loveridge, A. 1938. On a collection of reptiles and amphibians from Liberia. Proceedings of the New England Zoölogical Club 17:49–74.

Loveridge, A. 1941. Report on the Smithsonian-Firestone Expeditions collection of reptiles and amphibians from Liberia. Proceedings of the United States National Museum 91:113–140.

Loveridge, A. 1947. Revision of the African lizards of the family Gekkonidae. Bulletin of the Museum of Comparative Zoology 98:1–469.

Loveridge, A, and Williams, E.E. 1957. Revision of the African tortoises and turtles of the suborder Cryptodira. Bulletin of the Museum of Comparative Zoology 115:163–557 + 18 plates.

Miracle, M. E. G., Van Den Hoek Ostende, L.W., and Arntzen, J.W. 2007. Type specimens of amphibians in the National Museum of Natural History, Leiden, The Netherlands. Zootaxa N˚1482:25–68.

Nissen, C. 1969. Die zoologische Buchillustration ihre Bibliographie und Geschichte. Band I: Bibliographie. Anton Hiersemann, Stuttgart. 666 pp.

Nissen, C. 1978. Die zoologische Buchillustration ihre Bibliographie und Geschichte. Band II: Geschichte. Anton Hiersemann, Stuttgart. 604 pp. [information on Green on pp. 210–211, 215, 260]

Noble, G.K. 1924. Contributions to the herpetology of the Belgian Congo based on the collection of the American Museum of Natural History Congo Expedition, 1909–1915. Part III. Amphibia. Bulletin of the American Museum of Natural History 49:147–347.

Oliver, R. 1957. Sir Harry Johnston & the Scramble for Africa. Chatto & Windus, London. 368 pp.

Parker, H.W. 1936. Amphibians from Liberia and the Gold Coast. Zoologische Mededelingen 19:87–102.

Robertson, P. 2001. Liberia. Pp. 473–480 *In:* Fishpool, L.D.C., and Evans, M.I. (eds.), Important Bird Areas in Africa and Associated Islands. Birdlife International, Cambridge.

Schmidt, K. P. 1919. Contributions to the herpetology of the Belgian Congo based on the collection of the American Museum of Natural History Congo Expedition, 1909–1915. Part I. Turtles, Crocodiles, Lizards, and Chameleons. Bulletin of the American Museum of Natural History 39:335–624.

Schmidt, K. P. 1923. Contributions to the herpetology of the Belgian Congo based on the collection of the American Museum of Natural History Congo Expedition, 1909–1915. Part II. Snakes. Bulletin of the American Museum of Natural History 49:1–146.

Taylor, E. H., and Weyer, D. 1958. Report on a collection of amphibians and reptiles from Harbel, Republic of Liberia. University of Kansas Science Bulletin 38:1191–1229.

Trapé, J. F., Trapé, S., and Chirio, L. 2012. Lézards, crocodiles et tortues d'Afrique occidentale et du Sahara. IRD Orstom, Paris. 503 pp.

Villiers, A. 1963. Les serpents de l'ouest Africain. Institut Francais d'Afrique Noire. 2nd ed. Dakar, Senegal. 190 pp.

Weaver, J. R. H. (ed.). 1937. The Dictionary of National Biography. 1922–1930. Oxford University Press, Humphrey Milford, London. [Johnston account on pp. 456–458]

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